## **IETE REPORT 2022-23**

### IETE STUDENTS FORUM, KITS WARANGAL



# Kakatiya Institute of Technology & Science, Warangal

#### **IETE Report for 2022-23**

Department of Electronics and Communication Engineering (ECE), Kakatiya Institute of Technology and Science, Warangal a workshop in association with IETE.

## Report of Workshop on "Code Arduino"

Department of Electronics and Communication Engineering (ECE), Kakatiya Institute of Technology and Science, Warangal inaugurated on 05.11.2022 in association with IETE Warangal center.

**Introduction:** The Department of Electronics and Communication Engineering at Kakatiya Institute of Technology and Science (KITS), Warangal, organized a comprehensive workshop titled "**Code Arduino.**" The workshop aimed to introduce participants to the Arduino platform, a widely used open-source electronics prototyping platform based on easy-to-use hardware and software.

**Objectives:** The primary objectives of the workshop were:

- (i). To familiarize participants with the basics of Arduino programming.
- (ii). To provide hands-on experience in coding Arduino microcontrollers.
- (iii). To enable participants to develop simple projects using Arduino.

Participants: The workshop witnessed active participation from **30 enthusiastic students** from various disciplines within the institute. The diverse backgrounds of the participants added richness to the learning environment.

**Workshop Sessions:** The workshop comprised several interactive sessions, each focusing on different aspects of Arduino programming and project development. The sessions included:

(i). Introduction to Arduino: This session provided an overview of the Arduino platform, its components, and its applications in real-world projects.

(ii). Basics of Arduino Programming: Participants were introduced to the basics of programming in the Arduino Integrated Development Environment (IDE). They learned about variables, data types, control structures, and functions. (iii). Hands-on Exercises: Participants engaged in hands-on exercises to reinforce their understanding of Arduino programming concepts. They wrote and executed code snippets to control LEDs, read inputs from sensors, and perform basic calculations.

(iv). Project Development: In this session, participants worked in teams to develop simple Arduino-based projects under the guidance of experienced instructors. They applied their knowledge to build projects such as temperature monitoring systems, automatic lighting controls, and simple robotic prototypes.

**Conclusion:** The workshop on "Code Arduino" conducted by the Department of ECE, KITS Warangal, proved to be a resounding success. Participants gained valuable insights into Arduino programming and project development, which will undoubtedly benefit them in their academic pursuits and future endeavors. The interactive nature of the sessions fostered collaboration and creativity among the participants, making it a memorable learning experience for all involved.

Acknowledgment: The organizers express their sincere gratitude to the faculty members and staff of the Department of ECE for their support in conducting the workshop. Special thanks are also extended to the participants for their active participation and enthusiasm throughout the event.

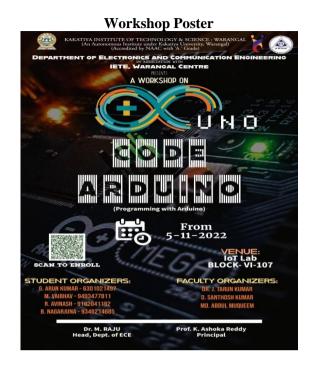
The team expresses their sincere gratitude to all the academic and administrative authorities namely Prof. K. Ashoka Reddy, Principal, KITSW; Prof. G. Raghotham Reddy, Dr. M. Raju(HOD-ECE); Sri. E. Suresh & Dr.J Tarun Kumar (Workshop Coordinators); Md Adbul Muquuem & D. Santosh Kumar (Co-Coordinators);

In conclusion, the workshop not only equipped participants with essential skills but also served as a platform for fostering a culture of innovation and experiential learning within the institute. Such initiatives are instrumental in nurturing the next generation of technocrats and problem solvers.

At the end of the workshop, the e-Certificate of Merit/ Participation was issued to every participant who had attended the workshop.

#### Student coordinators

Mr. G Arun Kumar Mr. M.vaibhav Mr. R Avinash Mr. B nagarjuna



#### Snapshot of workshop

