

**Department of
ELECTRONICS AND COMMUNICATION ENGINEERING**

**A Report on
A Five day Workshop on
"Expand, Educate and Engage on aspects of the ARDUINO"
(24/07/2023 to 28/07/2023)**

Department of ECE successfully conducted a five day workshop on "Expand, Educate and Engage on aspects of the ARDUINO" for II B.Tech students on 24th July to 28th July 2023. The aim of this workshop is to introduce participants to the fundamentals of electronics and programming using the Arduino platform. Through hands-on activities, participants will learn how to create and control various embedded projects. Ultimately, the workshop aims to inspire creativity, problem-solving, and a practical understanding of the intersection between technology and everyday life. The workshop comprises of theoretical lectures delivered by department faculty and also hands on live demonstration of ARDUINO, PROTEUS tools for design.

The students will have an exposure to ARDUINO boards, ARDUINO IDE, PROTEUS tool for design, Execution of projects. After completion of workshop, the students will be able to **design, verify, and execute** the real time embedded projects for problem solving.

Total 41 students were registered for the workshop and participation certificate for all 41 were issued by the college.

Mr.K.Rambabu, Assistant Professor and **Mr.B.Saidulu, Assistant Professor** worked as Faculty Coordinators for the five day workshop.

Day-1:

The workshop was inaugurated by Head of the Department, ECE **Dr. S.Ravi Chand** and Chief Controller of Examinations, **Prof P.Sreenivas Reddy** at 10:00 am.



Dr. S. Ravi Chand, Convener,
HOD-ECE addressed the
gathering



Mr. K. Rambabu,
Coordinator of workshop
addressed the gathering

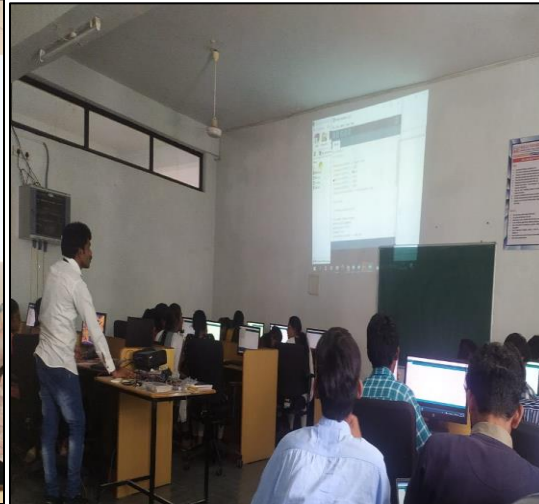


Prof. P. Sreenivas Reddy,
CoE-NNRG addressed the
gathering

In the morning session, **Dr.S.Ravi Chand** as resource person delivered the “**Arduino Life and its applications**” Afternoon session, “Introducing ARDUINO boards, ARDUINO IDE Installation.



Dr.S.Ravi Chand Professor. as resource person delivered the concepts of “**Arduino Life and its applications**”



Introducing ARDUINO boards, ARDUINO IDE Installation.

Day-2:

In morning session, resource person **Mr. Suresh Nalla** delivered the theoretical session on “**Microprocessors vs Microcontrollers vs Arduino**”.

Afternoon session, resource person **Mr.K.Rambabu**, “Hand’s on Session” that includes **Blinking LED, Using Multiple LED’s**” by ARDUINO boards and IDE.



Mrs. Suresh Nalla, Asst. Prof. as resource person delivered the concepts of “**Microprocessors vs Microcontrollers vs Arduino**”.



Hand’s on session “**Blinking LED, Using Multiple LED’s**” by ARDUINO boards and IDE”

Day-3:

In morning session, resource person **Mr.B.Saidulu** delivered theoretical Session on “Sensors, Actuators, Motors and Motor Drivers”.

Afternoon session,resource person **Mr.K.Rambabu**,"Hands on session,design of Real time projects by sensors, LED's.Light-Activated LED Blinking, Temperature Monitoring with LED Display.



Mr.B.Saidulu, Asst. Prof. as resource person delivered the concepts of Sensors, Actuators, Motors and Motor Drivers.



Hands on session,Light-Activated LED Blinking, Temperature Monitoring.

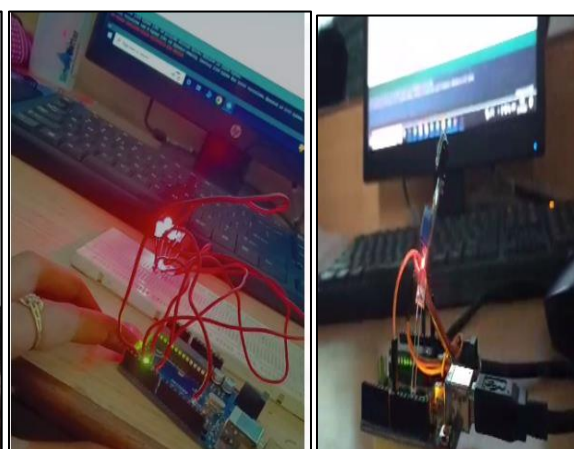
Day-4:

In morning session, resource person Mr.M.Sharath Chandra delivered a lecture on "ARDUINO Programming".

Afternoon session, resource person **Mr.K.Rambabu**,"Implementation of Traffic Signal, Ultrasonic Distance Measurement.” Was designed by ARDUINO boards and sensors, LED’s, LED Display.



Mr.M,Sharath Chandra delivered a lecture on "ARDUINO Programming"

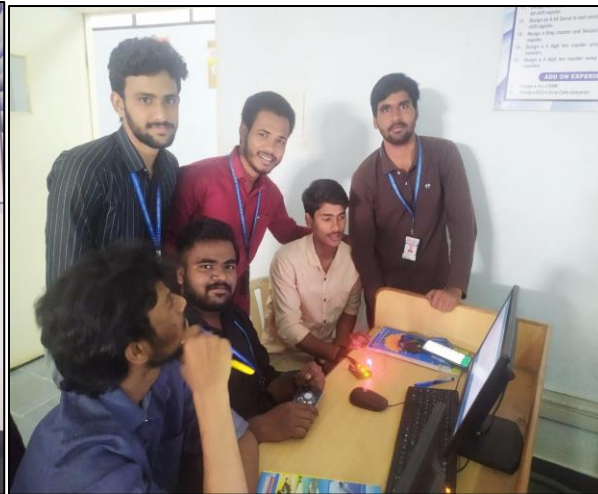


Implementation of Traffic Signal, Ultrasonic Distance Measurement.

Day-5:

In morning session, resource person **Mr.B.Ravi** delivered a lecture on **"Introduction to Embedded IOT and PROTEUS software"**.

Afternoon session, resource person **Mr.K.Rambabu**, Hands on session to Execute all ARDUINO Projects done in day 1,2,3,4 by using PROTEUS TOOL.



Mr.B.Ravi delivered a lecture on "Introduction to Embedded IOT and PROTEUS software".

Hands on session by students.

Finally, the workshop ended with a valedictory session, in the presence of Director Dr.C.V.Krishna Reddy garu, Dean School of Engineering Dr.G.Janardhana Raju garu and Head of Department Dr. S.Ravi Chand. Student participants received their certificates from the Director, Dr.C.V.Krishna Reddy and Dean School Engineering Dr.G.Janardhana Raju.



End Notes by Dean School of Engineering Dr.G.Janardhana Raju.



End Notes by Director Dr.C.V.Krishna Reddy.



Student Participant is receiving Certificate from Director Dr. C.V. Krishna Reddy.



Student Participant is receiving Certificate from Dean School of Engineering Dr. G.Janardhana Raju.



End Notes by Convenor & HOD-ECE, Dr. S. Ravi Chand.



Vote of Thanks by workshop Coordinator Mr. B. Saidulu.



Workshop Participants with Convener &HOD, Coordinators and Faculty.



Convener&HOD of Workshop with his team

Outcomes of the Workshop:

During this intensive 5-day workshop, participants will develop a strong foundational understanding of electronics and microcontrollers, gaining the ability to proficiently write and execute code for hardware control. Through hands-on projects, attendees will learn to integrate a variety of sensors and actuators, transforming theoretical knowledge into practical applications. The workshop will foster critical thinking and creative problem-solving as participants tackle challenges, collaborate on group projects, and explore innovative uses of technology. By the end, participants will emerge with enhanced confidence in electronics and programming, equipped with a portfolio of diverse projects that highlight their newfound skills in project realization, teamwork, and effective communication.

Place: Hyderabad

Date: 31/07/2023

K. Rambabu.

Coordinator

R. S. J.
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