Department of Electronics and Telecommunication Engineering

Event Report

Introduction to Arduino, R-Pi and IoT

January 01 to February 5, 2026

Event Information
Event Type: Value added course
Event title: Introduction to Arduino, R-Pi and IoT
Resource Person: 1. Prof. Pratibha Joshi 2. Prof. Prachi Shahane
Event date: 01/01/26 to 31/01/26
Organized for: FE Students
Organized by: Department of Electronics and Telecommunication and Computer Engineering
Attachments: **1. Photographs (in JPEG/PNG)** **2. Attendance report** **3. Feedback** **4. Impact Analysis**

Event Description

The Department of EXTC and Computer organized a Value Added Course titled **"Hands–On: IoT Using Arduino, Raspberry Pi & ESP32 Boards."** The course was conducted by Prof. Pratibha Joshi and Prof. Prachi Shahane with the objective of enhancing students' practical knowledge in emerging IoT and embedded system technologies. The program focused on bridging the gap between theoretical concepts and real-world industrial applications. The main objectives of the course were:

- To introduce students to the fundamentals of Internet of Things (IoT) systems.
- To provide hands-on experience with Arduino Uno, Raspberry Pi (RPi), and ESP32 boards.
- To enable students to understand sensor interfacing and hardware–software integration.
- To develop practical skills required for embedded system design and IoT-based applications.
- To encourage innovation, problem-solving, and project-based learning.
- To prepare students for industry requirements in IoT, automation, and smart system development.

1. **Photographs (in JPEG/PNG)**

2. Attendance report

SIES GRADUATE SCHOOL OF TECHNOLOGY

Value Added Course on IoT Using Arduino,R-pi, ESP32 and Node MCU

Sr NO.			Date	02/01	02/01	17/01	24/01	4/2	5/2
1	125A8106	Namit Nagesh Shetty ✓	AIDS						
2	125AX009	Bhavya mangilal chouhan	AIDS						
3	125A9024	Kumar Kashinath Mhatre ✓	AIML						
4	125A3045	Krunal Kalpesh Kilje ✓	IT						
5	125A3105	Akriti Singh	IT						
6	125A8104	Parash Santosh Sharma ✓	AIDS						
7	125A3028	Shreyash Gangadhare ✓	IT						
8	125AX038	Sandesh Kailash Panda	CSE-IOT						
9	125AX038	Sandesh kailash Panda	CSE-IOT						
10	125A9038	Bibek Anupkumar Padhy	AIML						
11	125A3031	Sahil Giri	IT						
12	125AX050	Prathik Sundar ✓	CSE-IOT						
13	125A8098	Sheikh aqib shafi	AIDS						
14	125A1175	shivam manoj kumar trivedi	Computer						
15	125A1117	Atharva Bholenath Patil	Computer						
16	125A7006	Bansi Swamireddy ✓	ECS						
17	125AX032	Nadar Shreenee Ganesan	CSE-IOT						
18	125AX037	Saismruti Panda	CSE-IOT						
22	125A3046	Pranav kokande ✓	IT						
23	125A2009	Pranav Chint	EXTC						
24	125A1139	Saiamod Sreekrishnan ✓	Computer	Saiamod	Saiamod	Saiamod	Saiamod	Saiamod	Saiamod
25	125A2055	Sampada Siganmalli ✓	EXTC		Sampada		Sampada	Sampada	
26		Amrita Pandey				Pandey			
27		Shikha Pandey							
28		Aarya Pomendkar							

3. Feedback (Analysis)

Responses Overview

Active

Responses	Average Time	Duration
12	00:50	14 Days

1. Name

12
Responses

Latest Responses
"Namit Nagesh Shetty"
"Pranav Kokande"
"SHREYASH SACHIN GANGADHARE"
...

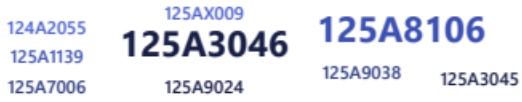
2 respondents (17%) answered Pranav kokande for this question.

2. Roll Number

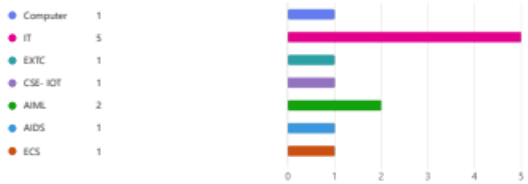
12
Responses

Latest Responses
"125A8106"
"125A3046"
"125A3028"
...

2 respondents (17%) answered 125A3046 for this question.



3. Branch : FE



4. CO1: Understand the fundamentals of IoT architecture and communication protocols used in real-time embedded and robotic systems.

5. CO2: Identify, select, and integrate hardware components such as sensors, actuators, and microcontrollers (e.g., Arduino, Raspberry Pi) for IoT-based robotic applications.

6. CO3: Interface IoT-enabled devices with cloud platforms or mobile applications to achieve real-time monitoring and control.

7. CO4 :Collaborate in teams to design, develop, test, and present a mini project demonstrating practical integration of IoT and robotics concepts for real-world applications.

8. Any Suggestion

Impact Analysis:

After completing the course, students were able to:

- Understand the fundamentals of IoT and embedded systems
- Interface sensors and actuators with Arduino, Raspberry Pi, and ESP32
- Develop basic IoT-based applications
- Apply programming concepts to real-time hardware systems
- observe data on serial monitor and Pushing Data to Things Speak.
- Design and implement innovative embedded system projects
- Gain confidence in handling industrial-level IoT hardware

Outcome:

The Value-Added Course successfully enhanced students' practical knowledge and

technical skills in IoT and embedded systems. The hands-on approach enabled students to gain real-time experience and understand industrial applications. The course contributed significantly to improving students' employability skills, technical competence, and readiness for industry requirements.

Hands –On: IoT Using Arduino, R-pi, & ESP32 Boards -01/01/26 to 31/01/26

SR no	student Group Name	Title of project	Link
G1	Pranav Madukar Kokande	Arduino-based automatic toll gate system	https://docs.google.com/document/d/10rX8rxac6llgSnmSihtrHhjBc93PRmHB/edit?usp=sharing&ouid=107731015817282007817&rtpof=true&sd=true
	Shreyash Sachin Gangadhare		
	Krunal Kalpesh Kilje		
	Bansi Swamireddy		
G2	Parash Santosh Sharma	Theft Protection System	https://drive.google.com/drive/folders/1W8Rzvtf3lwvxLmV4C6j68arqAyLLHqT7
	Namit Shetty		
	Sandesh Kailash Panda		
	Bibek Anupkumar Padhy		
	Shivam Manojkumar Trivedi		
G3	Prathik Sundar	SMART PARKING MANAGEMENT SYSTEM	https://siescms-my.sharepoint.com/:b:/g/personal/bhavyamciot125_gst_sies_edu_in/IQCDLZVBh6otT4rPRSK9Zn6eAXO9MSx4rkDrIkba7MCP8IQ?e=uZgd6t
	Bhavya Chouhan		
G4	Saiamod Sreekrishnan	Pushbutton-Based Counter with Countdown Timer Using Arduino Uno R3	WxVQ6B4tcj_q7y_ASwa2soXT37ONxRG67gdav8?e=MXuNUe
G5	Sampada Singanmalli	AI Study Assistant using ESP 8266	https://drive.google.com/drive/folders/1W8Rzvtf3lwvxLmV4C6j68arqAyLLHqT7

Sample Certificate:

SIES Graduate School of Technology (Autonomous)
RISE WITH EDUCATION
NAAC A+

EXTC/JAN26/01

CERTIFICATE

OF COMPLETION

THIS IS TO CERTIFY THAT

PRANAV MADUKAR KORANDE

has successfully completed the Value Added Course on " **IOT Devices using Arduino, Raspberry-Pi and ESP32 Boards** "
followed by an in-house internship from 1/1/2026 to 31/1/2026, organized by Electronics & Telecommunications Department and Computer Engineering Department ,SIES GST.
During the internship, he/she completed the project titled " **Arduino-Based Automatic Toll Gate System** "

Head of the Department

Principal