



SARVAJANIK
UNIVERSITY

INCLUSIVE | INTEGRATED | INNOVATIVE



SARVAJANIK UNIVERSITY
**SARVAJANIK COLLEGE OF ENGINEERING &
TECHNOLOGY**

REPORT of
Internet of Things Workshop

Organized by
Instrumentation and Control Department

Date: 13th October, 2025

Time: 9:30 to 4:30 pm

Faculty Coordinators

Dr. Tejal Joshi

Prof Jayanar Rana

Head of Department

Dr. Brijesh Naik

Student Coordinators

Bhavya Bodhanian

Krushang Prajapati

IOT Workshop Report –13th October, 2025

Gap Identification: Unawareness of recent technological trends for industries. Students are unaware about Internet of Things technology and implementation of IOT in engineering projects. The integration of the Internet of Things (IoT) is vital for developing industry-relevant skills in students and preparing them for a future where connected devices are ubiquitous.

Objective of the Workshop:

- 1) Introduce the students about the application of IOT in various fields
- 2) To give hands on training on esp8266 and integrate with Blynk, Thingspeak and Adafruit IO.
- 3) To show live monitoring of sensor data and controlling through mobile and web.

The Instrumentation & Control Department has successfully organized a workshop of IOT on 13th October, 2025 with the goal of covering basics of IOT with various sensor integration with Microcontroller which can help student increasing their participation in different Robotic and IOT competition. There were total 28 registered entries, but 26 participants actively took part in the workshop. The event was sponsored by IETE. So few members were there from IETE.

Highlights of the workshop

To guarantee a thorough knowledge of the topics, the training was separated into many sections. Following topics were covered to enhance the participants' learning experience. Three different IOT platforms Blynk, Thingspeak and Adafruit IO were covered with Hands-on Session. The interfacing of sensors like DHT11, Ultrasonic ,LDR and Potentiometer and LED and DC motor output devices with ESP826612E nodeMCU was covered with results displayed on Web and Mobile platform. The students were also guided how they can develop RoboCar controlled by Mobile for speed and direction control. The students were given lunch at canteen during break-time.

Outcome: Hands-on exercises were integrated throughout the workshop. This approach allowed participants to reinforce their understanding and gain confidence in developing their IOT applications.

- 1)Students learned to develop web and mobile interface in IOT platforms.
- 2)Participants learned how to prepare Arduino IDE by downloading useful libraries for using ESP826612E
- 3)The event encouraged students to develop IOT applications in robotics and Agriculture field.

We are thankful to HoD Dr. Brijesh Naik for motivating us to organize the workshop and grateful to Dr Nehal Shah SCET ISF Coordinator to sponsor our event from IETE fund.

Glimpses of Workshop:



Report Prepared and Compiled by
Tejal Joshi and Jayana Rana,
IC department SCET, Surat

After lunch attendance.

Sl. No.	Full Name	EN	Roll No.	Mobile	Signature
1	Aryan Singh	ET23BTIC026	IC	8780995797	<i>[Signature]</i>
2	Shiv patel	ET23BTIC020	Instrurr	8980069705	<i>[Signature]</i>
3	Vraj b vyas	ET25BTIC036	Instrurr	8799562804	<i>[Signature]</i>
4	VELARI ARYAN R.	ET23BTIC029	I&C	9898477474	V.B. Vyas
5	Dharmi Zazadiya	ET24BTEC070	Ec	9998840650	Vekari Arpan R.
6	JAY RASANIYA	ET24BTEC049	Ec	7863897006	<i>[Signature]</i>
7	Henil Goyani	ET23BTIC009	IC	8799606371	<i>[Signature]</i>
8	Yug Kahar	ET23BTIC013	Instrurr	8866682287	<i>[Signature]</i>
9	Sakshi Thakkar	ET23BTIC028	Instrurr	7622005065	<i>[Signature]</i>
10	Jeel amrutiya niteshbhai	ET23BTIC001	Instrurr	6351082475	<i>[Signature]</i>
11	Vyas Pruthvi Dhananjay	ET24BTIC036	Instrurr	6352452819	<i>[Signature]</i>
12	Mistry Rudra	ET24IMCA026	IMCA	7016353972	R.P. Mistry
13	Kevin babariya	ET23BTIC002	Instrurr	9328258303	<i>[Signature]</i>
14	Shaikh Mohammad Affan Moha	ET24BTIC031	IC	9173064699	<i>[Signature]</i>
15	Kachiya Nihal Ishvarbhai	ET24BTIC015	Instrurr	7698487204	Kachiya N. 2
16	Bhumit Jagdishbhai Virani	ET24BTIC035	Instrurr	9727260825	Bhumit Virani
17	Divya Mayurkumar Patel	ET24BTIC010	Instrurr	9328522566	<i>[Signature]</i>
18	Neel Korgaonkar	ET24BTIC017	Instrurr	7069629411	<i>[Signature]</i>
19	Jariwala Dev Snehal Kumar	ET24BTIC014	Instrurr	8140328399	<i>[Signature]</i>
20	Indranil Kulkarni	ET23BTIC011	IC	8160785262	<i>[Signature]</i>
21	Devarshi patel	ET24BTIC009	IC	7698898021	<i>[Signature]</i>
22	Deep Rakeshbhai Shah	ET24BTIC007	Instrurr	6355271007	<i>[Signature]</i>
23	Modi Fenish	ET24BTEC033	EC	9227019430	<i>[Signature]</i>
24	Jemil Sureshbhai Vekariya	ET24BTIC034	Instrurr	9727260825	<i>[Signature]</i>
25	Harshil sonani	ET24BTIC032	Instrurr	9099309410	<i>[Signature]</i>
26	Meet Manishkumar Patel	ET24BTIC028	IC	8200462486	<i>[Signature]</i>
27	Rohitkumar Prajapati	ET23BTIC021	I.C	7318599028	<i>[Signature]</i>
28	Balram sondagar	ET24BTEC058	Ec	8980006599	<i>[Signature]</i>
29	Hitanshu Desai		IC	9825865655	H.S. Desai
30	pruthvi bhagat	ET24BTEC002	EC	9824137638	<i>[Signature]</i>

Morning Attendance

Sl. No.	Full Name	EN	Dept	MOB	SIGN
1	Aryan Singh	ET23BTIC026	IC	8780995797	<i>[Signature]</i>
2	Shiv patel	ET23BTIC020	Instrum	8980069705	<i>[Signature]</i>
3	Vraj b vyas	ET25BTIC036	Instrum	8799562804	<i>V.B. Vyas</i>
4	VELARI ARYAN R.	ET23BTIC029	I&C	9898477474	<i>Velari Arjuna</i>
5	Dharmi Zazadiya	ET24BTEC070	Ec	9998840650	
6	JAY RASANIYA	ET24BTEC049	Ec	7863897006	
7	Henil Goyani	ET23BTIC009	IC	8799606371	<i>[Signature]</i>
8	Yug Kahar	ET23BTIC013	Instrum	8866682287	<i>Y.D. Kahar</i>
9	Sakshi Thakkar	ET23BTIC028	Instrum	7622005065	<i>[Signature]</i>
10	Jeel amrutiya niteshbhai	ET23BTIC001	Instrum	6351082475	<i>Jeel</i>
11	Vyas Pruthvi Dhananjay	ET24BTIC036	Instrum	6352452819	<i>R.P. Vyas</i>
12	Mistry Rudra	ET24IMCA026	IMCA	7016353972	<i>R.P. mistry</i>
13	Kevin babariya	ET23BTIC002	Instrum	9328258303	<i>[Signature]</i>
14	Shaikh Mohammad Affan Moha	ET24BTIC031	IC	9173064699	<i>[Signature]</i>
15	Kachiya Nihal Ishvarbhai	ET24BTIC015	Instrum	7698487204	<i>Kachiya N.2.</i>
16	Bhumit Jagdishbhai Virani	ET24BTIC035	Instrum	9727260825	<i>[Signature]</i>
17	Divya Mayurkumar Patel	ET24BTIC010	Instrum	9328522566	<i>[Signature]</i>
18	Neel Korgaonkar	ET24BTIC017	Instrum	7069629411	<i>[Signature]</i>
19	Jariwala Dev Snehal Kumar	ET24BTIC014	Instrum	8140328399	<i>[Signature]</i>
20	Indranil Kulkarni	ET23BTIC011	IC	8160785262	<i>[Signature]</i>
21	Devarshi patel	ET24BTIC009	IC	7698898021	<i>[Signature]</i>
22	Deep Rakeshbhai Shah	ET24BTIC007	Instrum	6355271007	<i>[Signature]</i>
23	Modi Fenish	ET24BTEC033	EC	9227019430	<i>[Signature]</i>
24	Jemil Sureshbhai Vekariya	ET24BTIC034	Instrum	9727260825	<i>[Signature]</i>
25	Harshil sonani	ET24BTIC032	Instrum	9099309410	<i>[Signature]</i>
26	Meet Manishkumar Patel	ET24BTIC028	IC	8200462486	<i>[Signature]</i>
27	Rohitkumar Prajapati	ET23BTIC021	I.C	7318599028	<i>[Signature]</i>
28	Balram sondagar	ET24BTEC058	Ec	8980006599	
29	Hitanshu Desai		IC	9825865655	<i>H.S. Desai</i>
30	pruthvi bhagat	ET24BTEC002	EC	9824137638	

Schedule and the Topics covered in Workshop

1	IOT Introduction	30 mins
2	Setup ESP8266 module with Arduino IDE and write a program to demonstrate blinking of Inbuilt and External LED	1 hour
3	Setup Blynk Cloud for Web based interface and Blynk IoT App on mobile. Connect ESP8266 with temperature humidity sensor DHT11. Write a code to measure and demonstrate reading of temperature and humidity on Blynk cloud as well as on Mobile App	1 hr. 30 mins
4	Use an ultrasonic sensor and write a program to monitor distance using Thingspeak cloud. Test ultrasonic sensor and display data on serial terminal.	1 hr. 30 mins
5	Setup Adafruit IO cloud platform. Use an LDR Sensor and measure light intensity and monitor using Adafruit IO. Demonstrate LED turn on/off based on light intensity measurement.	1 hr. 30 mins