



## Sandip Institute of Technology and Research Centre

At & Po – Mahirawani, Trimbak Road, Tal & Dist – Nashik

Phone: (02594) 222552,53,54, Fax: (02594) 222555

website : [www.sandipfoundation.org](http://www.sandipfoundation.org), e-mail : [principal@sitrc.org](mailto:principal@sitrc.org)

(Approved by AICTE, New Delhi, & Govt. of Maharashtra and Permanently Affiliated to Savitribai Phule Pune University (Formerly Pune University), Pune.

Accredited with "A" grade by NAAC With CGPA Score of 3.11



### DEPARTMENT OF ELECTRICAL ENGINEERING

(A.Y 2023-24)

## NOTICE

Date: 25/9/2023

All students of TE and BE are hereby inform that the Department of Electrical Engineering is going to organizing a two days' workshop on "IOT using Arduino" on date 22/3/2024 to 23/3/2024 for SE and TE student's.

Students enroll their name to Prof. T. J. Bharambe before 29/09/2023.

**Time:** 10:00AM To 5.00PM

**Venue:** EE Dept .SITRC, Nashik



**HOD**

**Electrical**

Head of Department

Electrical Engineering

Sandip Institute of Technology and Research Centre  
Mahirawani, Nashik-422213



## Sandip Institute of Technology and Research Centre

At & Po – Mahirawani, Trimbak Road, Tal & Dist. – Nashik

Phone: (02594) 222552,53,54, Fax: (02594) 222555

website : [www.sandipfoundation.org](http://www.sandipfoundation.org), e-mail : [principal@sitrc.org](mailto:principal@sitrc.org)

(Approved by-AICTE, New Delhi, & Govt. of Maharashtra and Permanently Affiliated to  
Savitribal Phule Pune University (Formerly Pune University), Pune.

Accredited with "A" grade by NAAC With CGPA Score of 3.11



### DEPARTMENT OF ELECTRICAL ENGINEERING

(A.Y 2023-24)

#### Theory Course Content- Topics covered during the Workshop-

**Module 1:** Introduction to MATLAB and Basic Programming Concepts

**Module 2:** Advanced MATLAB Programming and Applications

#### Program Agenda-

Day	Time	Program	Topic
1	10 am To 1 pm	Morning session	Module 1: Introduction to MATLAB and Basic Programming Concepts
	1 pm To 2 pm		<b>Lunch Break</b>
	2 pm To 5 pm	Evening Session	Module 1: Introduction to MATLAB and Basic Programming Concepts
2	10 am To 1pm	Morning session	Module 2: Advanced MATLAB Programming and Applications
	1 pm To 2 pm		<b>Lunch Break</b>
	2pm To 5 pm	Evening Session	Module 2: Advanced MATLAB Programming and Applications



## Sandip Institute of Technology and Research Centre

At & Po – Mahirawani, Trimbak Road, Tal & Dist. – Nashik

Phone: (02594) 222552,53,54, Fax: (02594) 222555

website : [www.sandipfoundation.org](http://www.sandipfoundation.org) e-mail : [principal@sitrc.org](mailto:principal@sitrc.org)

(Approved by AICTE, New Delhi, & Govt. of Maharashtra and Permanently Affiliated to

Savitribai Phule Pune University (Formerly Pune University), Pune.

Accredited with "A" grade by NAAC With CGPA Score of 3.11



### DEPARTMENT OF ELECTRICAL ENGINEERING

(A.Y 2023-24)

## Workshop Report

**Name of the Event:** VAP on "IOT using Arduino"

**Event Date:** 22/3/2024 to 23/3/2024

**Event Conduction Duration:** 10.00 am to 5.00 pm

**No of Participants:** TE/BE: 51 Students

**Name of Resource Person:** Prof. Sushant Pawar, E&TC SITRC

**Name of Event Coordinator:** Prof. T. J. Bharambe (Asst. Prof, Electrical Dept., SITRC, Nashik)

### Course Objectives:

1. **Introduce IoT Fundamentals:** To familiarize participants with the basics of the Internet of Things (IoT), its applications, and how IoT is transforming industries and everyday life.
2. **Hands-On Experience with Arduino:** To provide practical experience with the Arduino platform and how it can be used to interface sensors, actuators, and communication modules to create IoT systems
3. **Understanding Communication Protocols in IoT:** To introduce participants to communication protocols commonly used in IoT, such as MQTT, HTTP, and Wi-Fi, and demonstrate how these protocols can be implemented on Arduino-based systems.
4. **IoT Security Concepts:** To provide a basic understanding of security concerns in IoT systems and methods to secure IoT devices, including encryption and secure communication.

### Course Outcomes:

1. **Understand the Basics of IoT:** Explain the core concepts of the Internet of Things (IoT) and its applications in various domains such as home automation, healthcare, agriculture, and smart cities.
2. **Set Up and Program Arduino for IoT Projects:** Program an Arduino board to interact with sensors (temperature, humidity, light, etc.) and actuators (motors, relays, LEDs).





## Sandip Institute of Technology and Research Centre

At & Po – Mahirawani, Trimbak Road, Tal & Dist. – Nashik

Phone: (02594) 222552,53,54, Fax: (02594) 222555

website : [www.sandipfoundation.org](http://www.sandipfoundation.org), e-mail : [principal@sitrc.org](mailto:principal@sitrc.org)

(Approved by-AICTE, New Delhi, & Govt. of Maharashtra and Permanently Affiliated to

Savitribai Phule Pune University (Formerly Pune University), Pune.

Accredited with "A" grade by NAAC With CGPA Score of 3.11

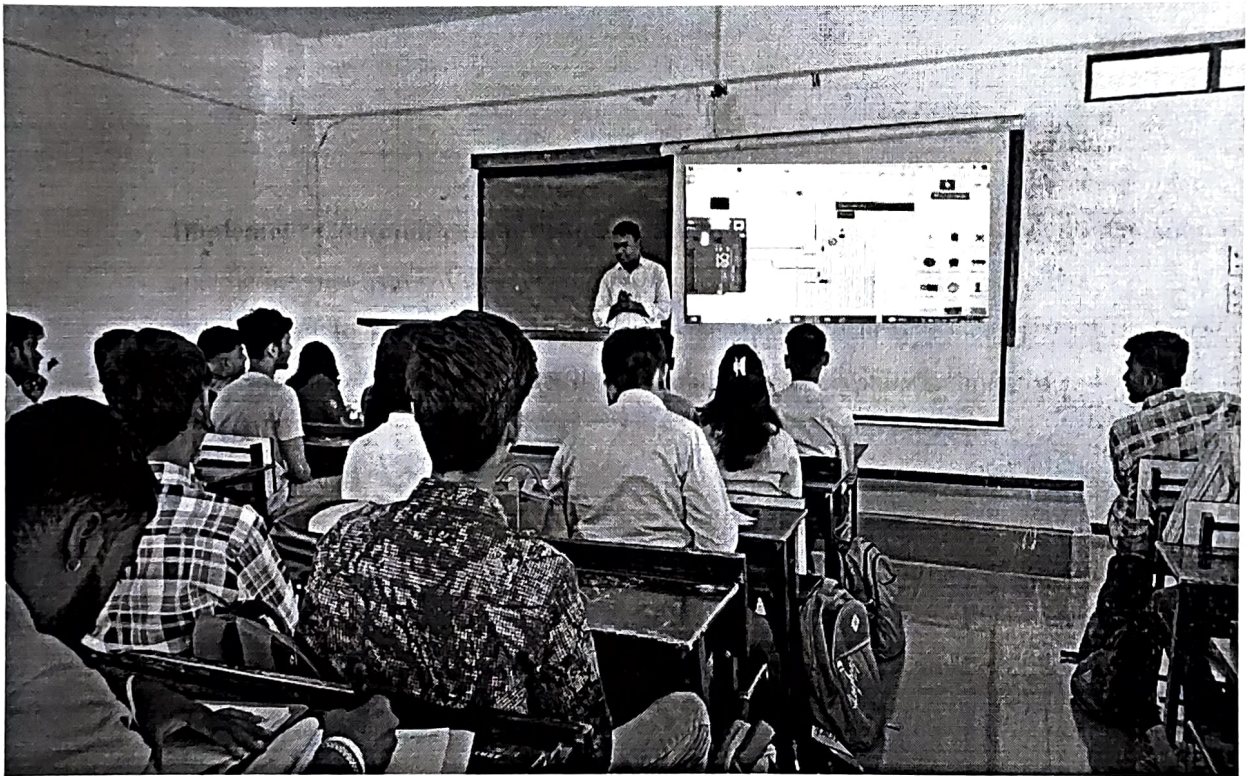


SANDIP  
FOUNDATION



3. **Implement Communication Protocols for IoT:** Set up communication between Arduino and the internet using Wi-Fi (via modules like ESP8266 or ESP32).
4. **Understand IoT Security Basics:** Understand basic security concepts for IoT devices, such as secure communication (SSL/TLS) and basic encryption techniques.

### EVENT PHOTOS:



Prof. Sushant Pawar, explaining about IOT using Arduino