



# Jayawant Shikshan Prasarak Mandal's JSPM Narhe Technical Campus

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DTE Code : 6755 PUN Code : CEGP019070 AISHE Code : C-45874



Date (mm/dd/yyyy): 12/24/2024

## Department of Mechanical Engineering 2024-25 Sem-I Event Summary Report

**Name of Event:** Mini project on Use of Arduino microcontroller with Sensors/Relay

**Event Type:** Project

**Date & Time of Event (mm/dd/yyyy):** From 8/5/2024 8:30:00 To 12/19/2024 16:00:00

**Venue:** Department of Mechanical Engineering

**Attendee:** Students

**Class:** SE

**No. of Attendee:** 110

**Chief Guest:** NA

**Guest of Honor:** NA

**Key Speaker/Expert:** Dr S. L. Borse

**Sponsored by (If any):** NA

### Event Overview:

This PBL activity was conducted to enhance confidence of Mechanical students to use sensors and microcontroller. Project-based learning (PBL) is a teaching method that involves students working on real-world projects to demonstrate their knowledge and skills. This activity was done under course Electrical and Electronics Engineering but focus was Mechanical Engineering Applications. This was group mini project. List of projects were, i) Sound Sensitive Lights, ii) Interfacing Arduino uno with PIR motion sensor, iii) Detecting rain, iv) Detect smoke and display led and play alarm v) Thermocouple with arduino vi) humidity sensor with Arduino vii) LDR sensor viii) Arduino Ultrasonic distance sensor ix) Arduino Modules - Flame Sensor x) Arduino speed detector xi) Controlling A Solenoid Valve With Arduino xii) Controlling temperature of poultry farm Some videos of above projects, 1) Interfacing Light Dependent

Sensor to Arduino Uno <https://youtu.be/6pPDVtazU2U?si=DrONW37MRcOOKjIU> 2) Humidity Sensor with Arduino <https://youtu.be/Yn-FaXr2kbY?si=bSwgd9qiCotPj6lo>

**Objectives of Event:**

1) Students should be able to use microcontroller arduino with sensor

**Outcomes and Feedback:**

1) Students were able to use microcontroller arduino and sensors

**Glimpses of Events: -**



Humidity Sensor with Arduino



Switching on/off bulb through computer with arduino

1) Humidity sensor 2) Switching on-off bulb through computer with arduino

Project Coordinator



Dr. M. A. Kumbhalkar  
**HOD**  
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