

# *Hardware Hustle*

Unleash your creativity and technical skills to revolutionize industry! Dive into a 7-hour challenge armed with a state-of-the-art kit of your choice—complete with a microcontroller, various sensors, and essential actuators—to design smart, efficient automation solutions. Collaborate with fellow innovators, push the boundaries of IoT, and compete for exciting prizes. Ready to transform the future of industrial automation? Let's hard-a-thon it!

Timing: 4th April 2025 , 9:00am - 6:00pm.

Actual Hackathon timings: 09:30 am - 04:30 pm

Team members- 2 or 3

Prizes: 1st prize: 15k

2nd prize: 5k

## Problem Idea: IOT in Industrial Automation

### Parts List

Microcontroller (with wifi),  
Temperature & Humidity Sensor,  
Vibration Sensor,  
Proximity Sensors- IR, Ultrasonic  
Current Sensor,  
Gas Sensor,  
Load Cells,  
Relay,  
Servo Motor,  
Display,  
Accelerometer+gyro  
Microphone, speaker

# General Guidelines

## Hardware Hackathon Guidelines

### 1. Time Limit:

- Teams will have a total of 7 hours to conceptualize, build, and complete their prototype.
- No extensions will be granted under any circumstances.

Teams must adhere strictly to the timeline.

### 2. Pre-Hackathon Submission:

- Teams must submit a brief description of their project idea and select the required components from the provided parts list by 15th March.
- No component requests will be entertained after this deadline.

### 3. Team Composition:

- Each team can have a maximum of 3 members.
- All team members must be present during the hackathon.

### 4. Component Usage:

- Teams are only allowed to use components listed and provided as per their submitted parts list.
- Use of any external or unlisted components other than the main peripherals is allowed, but participants are required to get it.
- Teams should use all the components that they have chosen, not using any of the chosen components will result in penalties.
- Soldering irons, foam sheets, and double-sided tape will be provided by the organizers.
- Glue guns and any additional tools (other than those mentioned) must be brought by the participants.

## 5. Completed Prototype Submission:

- All prototypes must be ready and functional by the end of the 7-hour mark.
- Teams must hand over their completed prototypes to the coordinators immediately after the hacking period ends.

## 6. Kit and Component Responsibility:

- Teams will receive the components as per their pre-submitted list.
- Any damage to the components during the event will be the team's responsibility.
- Damaged components will not be replaced by the organizers.
- After the competition, the completed prototype must be handed over to the coordinators.

## 7. Safety and Conduct:

- Teams must handle all equipment responsibly and adhere to safety protocols.
- Refreshments, first aid supplies (masks, ORS, bandages), and fire extinguishers will be available for emergencies.

### Important Note:

- Teams failing to adhere to the rules or using unauthorized components will face disqualification.
- Judges' decisions will be final and binding.

## COORDINATORS

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