#### **WORKSHOP ON ROBOTICS AND IOT**

The main theme of conducting this workshop involves enhancement of the technical skills and knowledge. The Robotic Club-SNIST is an outstanding team which came up with conducting workshops and national level fests with thousands of participants and loads of ingenious ideas.

# **About Workshop**

Session1: 9 am-12:30pm Session2: 2pm-5pm

# DAY1:

# Session 1:

- Introduction to robotics
- Introduction to arduino
- Basics of NodeMCU

### Session2:

- Hands-on experience
- Basic robot using DPDT
- WiFi controlled robot(NodeMCU offline mode)

## DAY2

## Session 1:

- Types of communication
- Vision of IOT
- Introduction to IOT
- What is cloud?
- What is data analytics?
- NodeMCU in detail
- What are sensors?(All about sensors)

# Session2:

• We learn how to use cloud to show data analytics of temperature sensor.

#### DAY3

## Session1:

- Practical session on IOT
- LED operation using Blynk
- WiFi controlled bot using Blynk
- IFTTT with Blynk or Adafruit IO(for voice controlled LED)

## Session 2:

A competition will be conducted between the students who have formed a team during Session 2 of each of the three days. (Teams will be formed by us). The best performer among them will be rewarded. The competition will be based on what has been taught during the workshop.

# Prerequisites of workshop:

- The prerequisites are none! All you require is the urge to learn and an open mind to understand and comprehend whatever is taught
- However, Laptops are mandatory.

#### **Details:**

- Fee is Rs.250/- per head and kit will be provided for hands on experience during the practical session.
- It is open for all the branches.
- Certificate will be provided for every participant.
- Kit consist of following components:
- (Arduino, Nodemcu, Chassis, DPDT Switch, Wheels, Arduino development board, DHT11, MQ 135/2, motors, other sensor modules and general requirements of the workshop)

#### Note:

Only 100 registrations are available.

Last Date for Registration: 3/1/2020.

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