# ROORKEE COLLEGE OF ENGINEERING, ROORKEE



## Department of ECE/EEE

(Academic Session 2020-21)

# **Report One Day Workshop**

on

"Internet of Things (IoT)"

**Under the TEQIP-III** 

(Uttarakhand Technical University, Dehradun)

Held on 07 March-2020

Dr. Yashveer Singh (Coordinator)

Mr. Anurag Chandna (Registrar)

Prof.(Dr.) O P Dubey (Director)

### Objective:-

The Department of ECE/EEE, Roorkee College of Engineering, organized a One-day Workshop on "Internet of Things (IoT)" on 07<sup>th</sup> March 2020, at Conference Hall. The purpose of this Workshop was to expose the students to the fields of Internet of Things with hands-on training. The basic and important constituent to establish a strong relationship between diverse fields of science and engineering is advanced research and development of many technologies that make our existence so comfortable. This Workshop will cover a wide range of interdisciplinary topics on various aspects of advanced materials.

The Guest Trainer was Mr. Bhupendra Singh, who is working as a Director in Schematics Microelectronics Top Floor Khanna Complex, Prem Nagar, Dehradun. There were 160 participants (75-Faculty & 85 Students) attended this workshop.

## Inauguration & Felicitation:-

The program was started with lamp lighting ceremony of goddess Sarswati by Ms. Nisha Dhiman (Workshop Convener), Director, Dean, All Heads of Department & Coordinators. The Guest Felicitated by Chairman Sir.



#### Welcome Speech & Overview of Workshop:-



The event started at 9.15 am with a Welcome Speech by **Dr. Deepika Sharma (AP/ECE)** who welcomed the dignitaries on the dais, as well as the faculty members and students who had assembled. Mr. Bhupendra Singh (**Corporate Trainer**), Prof. (Dr.) O.P Dubey (Director – RCE) and Prof. (Dr.) Yashveer Singh (Coordinator), Ms. Nisha Dhiman (HOD-ECE/EEE) were seated on the dais. A brief introduction about the Trainer was given. Dr. Deepika Sharma (AP-ECE) addressed the students about the importance of Internet of Things (IoT) and advised them to actively participate and gain hands-on training during the One-day Workshop. The Mr. Bhupendra Singh set the Workshop rolling at 9.30 am.

Mr. Bhupendra Singh trained the students on various topics in the field of Internet of Things (IoT). The topics of Internet of Things are listed below:-

- 1. Embedded System,
- 2. Automation
- 3. Security & Planning
- 4. Web App Penetration Testing and Ethical Hacking
- 5. Artificial Intelligence
- 6. Installation of Aurdino IDE.
- 7. Installation of Various Drivers.
- 8. Configuring Wi-Fi Interfacing
- **9.** Blinking of LED Program.

At the forenoon session of the first day of the Workshop, i.e. 07/03/2020, he gave an Introduction in to Internet. What is Internet of Things, Introduction about Aurdino Microcontroller, Detail discussion about various pins of Aurdino Pin. The students were introduced to the concept of Wi-Fi Interfacing. The students installed the Aurdino IDE on their laptops. They also learnt about the Node Mcu Aurdino Board. In the afternoon session, Mr. Bhupendra Singh taught the working of Temperature humidity sensor, Proximity sensor, Connecting wires, Leds, Motor. The students also got hands-on training in Sensor, and working of Aurdino IDE. He also taught the technique to Monitoring nodes on IOT Platform. In the afternoon session, Mr. Singh dealt with the working of Controlling Motor through Web Server. He stressed the importance of Internet of Things (IoT) and Idea given about various sensors used for IoT based Applications.













#### Vote of Thanks:-

Ms. Nisha (HOD –ECE/EEE) distributed certificates to the participants who participated in the Workshop. The Workshop concluded at 4.30 pm on 07/03/2020. Ms. Nisha Dhiman & Saurabh Verma delivered the Vote of Thanks at the end of the Workshop.



