NARAYANA ENGINEERING COLLEGE::NELLORE

AUTONOMOUS

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

1	Name of the Activity/Event	Value Added course on "**Internet Of Things**"
2	Date of Activity/Event	**03/01/2022 To 08/01/2022**
3	Organized by	**Department of Electronics And Communication Engineering**
4	Place of Activity/event	Visweswaraiah Auditorium
5	Resource persons / guest / organization	**Pantech Solutions, Chennai**
6	Type of activity/Event	Value Added Course
7	Activity/Event objectives	• This course aims at providing an opportunity for students to enrich their knowledge and skill in developing various solutions for solving engineering problems in the society. • This program serves as a platform for students to work with the recent trends in IoT.
8	Participation	Students: 107 Faculty: - Total Participation: 107
9	General remarks	1. To Learn the concept and architecture of IoT 2. To Understanding IoT components 3. To IoT related protocols 4. Explanation on IoT domain related to Hardware, Sensors and connectivity protocols. 5. Explanation of Raspberry Pi hardware and installation.
10	Suggested Improvements	Need Hands-on session and more real time examples.
11	Enclosures	1. Program report with Snapshots 2. List of Students 3. Attendance sheet
12	Signature of In Charge	

The **E**lectronics and **C**ommunication **E**ngineering department has organized a **Value added course** on **"Internet Of Things "** from **03/01/2022**

To 08/01/2022. The resource Organization was Pantech Solutions, Chennai. The III B.Tech students from the ECE department have attended this value added course.

The Resource persons from Organization shared their insights, real life scenarios, practical use cases and their solutions on the Internet of Things. The course started by providing real IoT experience at the registration desk itself – when students mobile flashed up with the workshop welcome screen on their arrival at the registration desk.

On the first day the Session started with keynote lecture on IoT and future of connected world. It also provided the insights of IoT applications for smart Transport, smart cities, Energy Conservation, Health and Fitness, smart phones, Home automation and Smart Agriculture.

The next session began with how the proliferation of connected devices and the Technology capabilities is transforming the industry with cloud data. They also discussed the various areas of IoT analytics application and World of Wearable Applications which includes Health Care, Smart Appliances and Wearable Technology.

The following session continued with the history, Features of IoT. Discussed about Architecture of IoT i.e., Perception layer, Network layer, Application layer. Working of IoT which includes Sensors & Actuators, its Connectivity with the people and Processes were discussed. To illustrate the concept of computing more lucid, they shared videos on technologies related to it

In the later sessions, They discussed Raspberry Pi hardware and its installation. Also discussed real time application of IoT using Raspberry Pi .

IoT Security which includes mobile security, access control, authentication, privacy, Policy Enforcement, Secure Middleware and Confidentiality were discussed with real time examples and the session was made really interactive by providing an opportunity to suggest a solution to real life scenario.

Later on the course was planned to provide hands on experience with IoT device and application. Students were introduced to the wifi concept from a programming point of view and its relevance to IoT device. All the students

participated in coding for accessing light, blinking of LED and sensing a Buzzer pressed on IoT kit though android application.

Students participating in coding using IoT kit

Resource persons with Students

Resource persons with Students

Enlightening the Young Minds about the importance of IoT in real world