TECNIA INSTITUTE OF ADVANCED STUDIES

NAAC ACCREDITED GRADE "A" INSTITUTE

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Event	:One Day Workshop
Topic	:Robotics & IOT
Resource Person	:Mr. Ritesh Kumar
Schedule	:10.30 am onwards
Date	:27th January 2020
Day	: Monday
Venue	: BCA Department PG Building 4th Floor Room No:-1410
Faculty In charge	: Dr.Vishal Khatri, HOD (Computer Application Department)
No of Students	:60

Objectives:

To learn about:-

- Robotics
- Embedded System
- Internet of Things (IoT)
- Exposure to various sub-fields and technology stacks of IoT
- Enable people to convert their IoT product idea into a working prototype

Certificates Distribution By Director Sir

Mr.Ritesh KumarAPTRON Solutions Pvt. Ltd. NODIA (UP),Addressing The Students

Students Attending The Workshop

Report Of Workshop On Robotics & IOT:

Tecnia Institute of Advanced Studies organized a workshop on 27[th]January,2020 at BCA Deptt (PG Block, 4th Floor Room No:-1410), by Corporate Trainer Mr. Ritesh kumar for APTRON Solutions Pvt. Ltd., NODIA (UP), BCA 2[nd]and MCA 4[th]Sem. The workshop divided into module and sub modules are:

1. Introduction to the Internet of Things
2. The Basics of Sensors & Actuators
3. Basic IOT Architecture
4. The IOT Platforms Available
5. Different data types
6. Recursive function
7. Node MCU/ESP8266, Respberry Pi, Arduino

The workshop started with a welcome speech by Dr. Vishal Khatri, H.O.D of BCA department. In his welcome speech, he asked students to remain focused and to put their constant efforts to achieve excellence, learn new innovative things and discussed the significance of IoT and Robotics.

The workshop was followed by the introduction speech by Mr. Ritesh Kumar on Robotics and IOT. He further continued by explaining the benefits of IOT in future and also told that the Internet of Things (IoT) is the next big technology and the most important factor impacting fundamental business logic in the coming decades. He explained the architecture of IOT with the help of a diagram.

He discussed the different platforms available for being an IT expert.

He explained the different types of data types with the help of examples and told the usage of each data type in different coding languages. He also demonstrated the working of single board computers using Node MCU/ESP8266, Respberry Pi, Arduino.

He then explained the recursive function through an example and by coding as well.

In the end of the workshop, there was a question-answer round held where the students clarified their doubts regarding Robotics and IOT also Mr. Ritesh Kumar asked few questions related to the topic.

Learning Outcomes:
The students have learnt:-

1) Types of Robots and Circuit design for robotics
2) Sensors for robotics and Motion control for robots
3) Controller circuits for robots
4) Open source hardware and interfacing
5) IoT Data Communication protocols.
6) IoT Components, Devices, and Software Requirements.
7) Display devices and IOT Cloud Service