







## KKR&KSR Institute of Technology and Sciences Vinjanampadu, Guntur, Andhra Pradesh-522017

Approved by AICTE, New Delhi and Permanent Affiliation from JNTUK, Kakinada Accredited with "A" Grade by NAAC & NBA Accreditation Status for 4 UG (CSE, ECE, EEE, ME) Programs

# Ten Days Workshop on Internet Of Things (IOT) From 2<sup>nd</sup> December to 11<sup>th</sup> December 2019 By

Miss. Mamidi Jyoshitha and Mr.B.Mahidhar, Trainer cum developer APSSDC

## **About Resource Persons:**

1. Miss. Mamidi Jyoshitha

Trainer Cum Developer

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## **About APSSDC**

The Government of Andhra Pradesh has a vision to be among the three best states in India by 2022 and to achieve the status of a developed state by 2029. To achieve this goal, the State has adopted a mission-mode approach and has created a 'Knowledge and Skills Mission' along with six other missions. This mission will look into the manpower requirements of all other missions. Towards this, the Government of Andhra Pradesh has created a separate Department of Skill Development, Entrepreneurship and Innovation, to provide the thrust to skilling in the state and Andhra Pradesh State Skill Development Corporation (APSSDC) has been established as the implementing arm and spearheading the training skilling initiatives in the state.

## Vision of APSSDC:

The Government of Andhra Pradesh has the vision (Swarna Andhra Vision 2029) to make Andhra Pradesh among the three best states in India by 2022 when India celebrates its 75th year of independence and to achieve the status of a fully developed state by 2029.

## **Mission of APSSDC:**

To target 20 million people in AP in next 15 years towards skilling and entrepreneurship to meet skilled human power demands of all Missions and shape AP as the skilled-workforce and knowledge hub for the world









## 1. Objectives of the Event:

This program aims at providing an opportunity for participants to enrich their knowledge and skill in developing various solutions for solving engineering problems in the society. This program serves as a platform for research scholars, faculty, engineers and students to interact on cutting edge technologies in IoT.

The main objective of this workshop is to help students to develop research skills and competencies, acquaint them with contemporary real life aspects of public administration, and improve the effectiveness of their independent project work.

The Internet of Things (IoT) has evolved from the convergence of wireless technologies, micro-electromechanical systems (MEMS) and the Internet. By connecting things in the real world such as cars, buildings, and industrial equipment, IoT promises to revolutionize how we live and work. The IoT market is likely to experience around 28% year-on-year growth, rising to 5.4 billion connections across the globe by 2020, counting cellular, fixed line, satellite and short range wireless connections, up from 1.2 billion devices.

## **Understanding after completion of this Program:**

- ➤ Knowledge and understanding of fundamental IOT paradigms, architectures, possibilities and challenges, both with respect to software and hardware,
- ➤ A wide competence from different areas of technology, especially from computer engineering, robotics, electronics, intelligent systems.
- Learn the basics of Internet of Things and its applications.
- What "the Internet of Things" means and how it relates to Cloud computing concepts.
- ➤ How open platforms allow you to store your sensor data in the Cloud.
- ➤ The basic usage of the Arduino environment for creating your own embedded projects at low cost.
- ➤ How to connect your Arduino to your Android phone.
- ➤ How to send data to the Internet and talk to the Cloud.
- ➤ How to update sensor readings on Twitter (Social Networking Sites).
- ➤ Control a Relay Switch by texting from your Phone.

#### 2. Venue of the Event:

The event is organized in **APSSDC Cell** of KKR & KSR Institute of Technology and Sciences, Vinjanampadu, Guntur, Andhra Pradesh.

- 3. Date & Time of the Event: The Event is organized from 2<sup>nd</sup> to 11<sup>th</sup> December 2019
- 4. No. of students participated: 185
- 5. No. of faculties participated: Nil









## 6. Event photographs.





















## 7. Benefits in terms of learning/Skill/Knowledge obtained.

By attending this workshop participants got numerous benefits, including improving communication skills, gaining expert knowledge, networking with others and renewing motivation and confidence.

- ➤ Hands on experience on IOT using Arduino/Raspberry Pi
- > Top participants will be awarded as winners with the certificate of honor.
- ➤ Current scenario/job opportunities of embedded industries.
- ➤ Understanding the skill set required in a new employee in embedded industry.
- ➤ Understanding the robotics future and scope Understanding the different microcontroller available in the industry & their use.
- ➤ In-depth knowledge on design, construction and programming concepts involved in building an autonomous robot Learn & Interact with renowned Industry Experts.

## 8. One Participant Feed Back:

I am **K.Maneesha**, studying 3<sup>rd</sup> B.Tech ECE department in KKR &KSR Institute of Technology and Sciences. I have attended the Ten days workshop on "Internet Of Things (IOT)" First of all I want to thank my college management who provided such facility for all of us to learn and experience these workshops. In this regard my sincere thanks to AICTE-MHRD-IIC, who have been conducting such type of events for the student nourishment. I attended the workshop from 2<sup>nd</sup> to 11<sup>th</sup> December 2019. I learn the following key concepts from the workshop conducted on Internet of Things (IOT).

#### **Key topics**

- > Introduction to Robotics.
- ➤ Introduction to Embedded systems.
- > Introduction to programming in embedded.
- > Introduction to Relay Driver IC.
- Introduction to ADC.
- > Introduction To Wifi.
- ➤ Introduction to ESP 8266 module.
- ➤ Introduction to GPRS.
- ➤ Introduction to TCP/IP.
- > Introduction to Raspberry Pi
- Projects on ESP 8266
- Projects on IOT









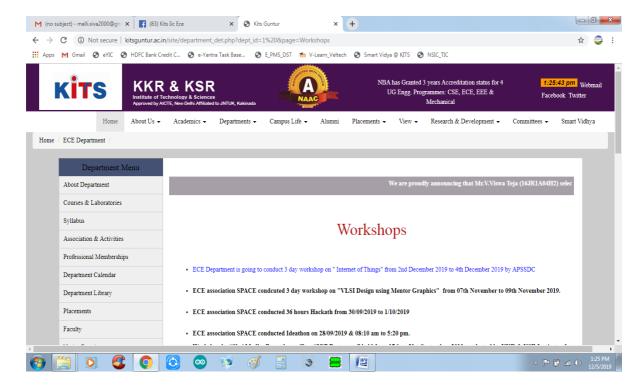
9. Promotion of the Event on the Social Media Website: (Link and Screenshot):

https://www.facebook.com/kitsiicece.ece.5/timeline?lst=100041639447228%3A100041639447228%3A1575531950



10. Promotion of the Event on the University/college Website : (Link and Screenshot)

http://kitsguntur.ac.in/site/department\_det.php?dept\_id=1%20&page=Workshops











## 11. 1-2 minutes video of the event (Drive Link Only):

https://drive.google.com/open?id=1G67cVrJRiOl-mrvH0-leUYq31JRDDfYl

- 12. Expenditure Amount (If any): RS.65,000
- **13. Remarks:** The workshop is organized smoothly with practical orientation.

## 14. Experiences and Output of the Session

All ECE Department 3<sup>rd</sup> Year B.Tech students are attended the workshop by **Miss. Mamidi Jyoshitha and Mr.B.Mahidhar, Trainer cum developer APSSDC on "Internet of Things (IOT)"** from 2<sup>nd</sup> to 11<sup>th</sup> December 2019, conducted by KKR & KSR Institute of Technology and Sciences in association with MHRD-IIC.

#### **Outcomes of the Session**

Miss. Mamidi Jyoshitha and Mr.B.Mahidhar, Trainer cum developer APSSDC as resource persons a workshop on "Internet of Things (IOT)" is organized. The session is Very useful and informative. Miss. Mamidi Jyoshitha and Mr.B.Mahidhar explained very clear about basics and involved in practical examples. This workshop is very useful to understand current research trends and we want to learn more about this research. So it is better to extend this session. They explained the importance of innovation and projects. Thank you very much to the management and MHRD-IIC for giving the opportunity.