**ABOUT THE WORKSHOP:**

The workshop is intended to cover the advance IOT. The Internet of things is the internet working of physical devices, vehicles, buildings and other items—embedded with electronics, software, sensors, actuators, and network connectivity that enable these objects to collect and exchange data.

During the course of workshop students will be leveraged to integrate concepts like modeling of design through real time hands-on practical sessions.

**ADVANTAGES:**

  Knowledge on real time applications on IOTs

  How IOT works with different industries

  Forming on IOTs different automation system

  Real Time industrial application on IOTs

**WORKSHOP OVERVIEW:**

  What is IOT? The need of IOT and its real time applications.

  How IOT works.

  Application  of IOT and Roles

  How communications works with IOT.

  Communication Protocol:

         HTTP

         HTPPS

  What is the role of IOT on different Sensor network?

  Sensor Design

  Interfacing Sensor with Node MCU

  Structural design of sensor with different applications.

  Design a real time application on IOT

  Real Time Project Local Server  hosting without security

  Performance analysis of that application.

  Project optimization of that application.

  Role of IOT communication in different Automation system.

  Real Time Project Local Server  hosting without security

  Design architecture of wireless network.

  Automatic Updates/uploads of sensor value on IP/web.

  Real Time monitoring of sensors on a particular IP Address/server

  Acquire a control signal from an IP.

  Server Security for Embedded system

  Google Assistance

  Real time project Cloud Server with  Google Assistance