IoT lab

Lab Description

The IoT Lab provides support to applied research (UG projects) aimed at the design, development and testing of solutions related to the Internet of Things with specific reference to its own applications in the field of home automation, industrial automation, agricultural applications and logistics/asset management.Students are made familiar with various Microcontrollers, Sensors, Texas DevelopmentKits, Various Communication modules, IoT Connected Development Kits and their intended use in various applications. The lab is used to train the students to implement the basic IoT experiments using the Microcontroller kits, Sensors and IoT Simulator Software.

Lab Facilities

IoT lab is well equipped with Texas Launch Pad, MSP 430 F 5525 Launch Pad, CC3200 Simple Link Wi Fi Launch Pad, NFC Module (Near Far Communication), Wi Fi Module, Zig Bee Module, Blue tooth Module, Node MCU (ESP 8266)TM4C 129E Crypto connected IoT Gateway Launch Pad, MSP 432 P401 R Launch Pad, MSP 430 G2XX Launch Pad (Development Board), TIVA Launch Pad EK-TM 4C 123 GX2, Launch XL, LTM 4C 129X IoT Connector Development Kit, Texas Development Boards, Sensor Hub Booster Pack, CC110L Booster Pack, CC3100 Booster Pack, Edumkii Education Booster Pack, Boost XL,IoT Simulator Software, Raspberry pi Microcontrollers, Raspberry pi camera, Arduino Microcontrollers, Smart Phones, Accelerometer, Gas Sensors, PIR Sensor, IR Sensor, Heart Rate Sensor, Dust Sensor, Temperature Sensors, Humidity Sensors, Sound sensor, Light sensor, Touch Sensor, Air Quality sensor, Sunlight Sensor, Moisture Sensor, Water sensor, Plane sensor, LED Displays, OLED Display, Relays, DC Motors with Driver module, Potentiometer and 40 Personal Computers with latest configurations (I5 and I7 processors)

Utilization

This lab is utilized for conducting the following courses:

- 10211EC202IoTLab
- 10211EC301Analog Integrated CircuitsLab
- 10211EC302 Digital Electronics Lab
- 10211EC303 Signal Processing Lab