

School of Computer Science & IT , DAVV

Internet of Things (IoT)

Class: M.Tech.(Network Management & Information Security) - II Semester

The course aims to impart knowledge on IoT with a solid theoretical foundation, and strong practical skills in the fields of computer technology, communications networks and IT, that provides a wide range of applications in the Internet of Things.

Upon completing the course, students will be able to:

- Understand IoT concept
- Gain knowledge of IoT Applications and Examples.
- Understand Technologies involved in IoT.
- Get insight of Data Modelling in IoT
- Understand Security models in IoT
- Explore and learn about IoT with the help of preparing projects designed with the Arduino.

List of IoT Experiments

To implement some basic experiments for

- Simple Alarm
- Light Controller
- Temperature Monitoring
- Humidity Monitoring
- Load Monitoring
- Motion Controller
- Fire Detection
- Object Detection
- Authentication mechanism

To develop some applications based on basic experiments:

- Traffic Light Controller
- Weather Monitoring
- Smart irrigation System
- Proximity based application

- Smart healthcare and assisted living
- Smart transportation and vehicles
- Intelligent Traffic Management System
- Smart Parking System
- Smart Waste Management System for Smart City
- Water Quality Management system
- Smart Umbrella System
- Gas Leakage Monitoring System
- Water Level Monitoring System
- Smart Doorbell system
- Air Pollution Meter
- Secure Key Distribution System
- Intrusion detection in IoT system.
- access control system