PROPOSED TRAINING SCHEDULE

Timing Schedule		
Day 1	FN	**Introduction** ❖ What is Internet of Things ❖ IOT Layers ❖ Connectivity **IOT Applications** ❖ Home ❖ Transport ❖ Health ❖ Buildings & Cities ❖ Compound Applications **Q & A** **Familiarizing ESP8266 (Hands-on sessions starts here)** ❖ Espressif ESP8266 Concept ❖ Family ❖ ESP Hardware-Features ❖ Familiarising ESP8266-12 Trainer kits ❖ ESP Software Development **ESP Standalone Programming** ❖ Using Arduino ESP Plugin ❖ Installing Plugin ❖ Writing Sketch **IOT Device Level Development** ❖ GPIO Programming & Testing ❖ Serial Port programming
	AN	**WiFi Basics** ❖ Concepts of Access Point, Station, SSID, Password, IP & Mac Address ❖ Making your IOT Device as an Access Point & Connect your Smart phone to the AP ❖ Making your IOT as a Station and connect it to your Smart Phone Hot Spot or WiFi Router **TCP/ IP Basics** ❖ IP Address ❖ Concepts of Server, Client & Ports ❖ HTTP Requests & Responses **Creating ESP as Server** ❖ Creating your IOT Server & Communicating with clients

Day 2	FN	**Creating ESP as Client** ❖ Creating your IOT Client & Communicating with Local Server **Thingspeak Online Server** ❖ Uploading data to thingspeak ❖ Reading data from tingspeak
	AN	**Mini Project** ❖ **Cloud based Temperature Logger** (The Students should create the device as a client and upload data to online server) **Project** ❖ **Home Automation** (Students should develop a system to control devices in a room through local network as well as internet)

Proposed Program Highlights

- Two day exclusive training on Internet of Things
- Most modern 32bitESP8266 WiFi enabled controller module
- Covers Device level to Cloud based Contents
- 80% of training will be hands-on/Practical sessions
- Specially designed IOT Trainer Kits
- Real life Home Automation Project
- Follow up trainings and continued support are offered even after current training, based on request
- 90 day free online support.

Contents of IOT Kit

- ESP8266 Module (ESP12F)
- USB to TTL Converter
- ESP12F Development Board
- Home Automation Board
- Jumper Wires: Female to Female
- Power Supply Adaptor
- Driver Software
- Software Development IDE
- PowerPoint Presentation