IOT SCHEDULE for 3 Days Workshop

Session 1

- Introduction to Embedded Systems.
- Advantages of Embedded Systems.
- Difference between microcontroller and microprocessor.
- Advantages of microcontroller.
- 8bit, 16 bit, 32 bit microcontrollers.
- Features of micro controllers.
- Internal diagram of microcontrollers.
- Pin diagram of microcontroller.

Session 2

- Programming.
  - Introduction to low level and high level languages.
  - Addressing modes.
  - Registers.
  - Assembly language programming.

Session 3

- Introduction to high level language.
  - Embedded c programming.
  - 10 different led’s programs.
  - 16 * 2 LCD programming.
  - LCD with led programming.
  - Motors
    - Dc motor
    - Gear motor
    - Stepper motor
Session 4

Programming
- ALL IC Drivers.
- Motors with LCD.
- Sensors
  - Smoke sensor
  - Alcohol sensor
  - Metal sensor
  - Fire sensor
  - PIR sensor
  - IR sensor
  - LDR sensor

Session 5
- Introduction to IOT (Internet of Things).
- IOT Development.
- Sensors with LCD programming.
- Serial communication.
  - Serial with sensors data transmission.
  - Serial with LCD.
  - IOT web channel creation.

Session 6
- Modules.
  - Android data transmission with serial and LCD
  - Data transmission to WEB page using IOT
- Sensors data Transmission with LCD & IOT.

Software implementation as well as Hardware checking for every session.