

D-60-A, DDA Flats, Raghubir Nagar Delhi New Delhi -110027

Workshopsmake your mobile 2015: Make your mobile is an innovative program that exposes talented students to research. It is an attempt to provide the enthusiasts a complete platform in the field of **Embedded and mobile communication.** In this 8 hour program students learn and develop their own mobile which can be controlled from Hyper Terminal using a GSM Module.

#### **Key features of Workshops 2015:**

- In-depth Knowledge of SIM900 and its use in home automation and robotics
- Training Certificate will be provided as par to Industries.
- Training delivered by Design Engineers (R&D team) of Spaad EduTech.
- Course details available online.

**Recommendation:** Beneficial for students having knowledge of some basic electronics, interested in making use of that knowledge to build projects.

**Prerequisite:** knowledge of basic Electronics

#### Basic electronics

- static electricity
- voltage
- current
- resistance
- branches n nodes
- KVL,KCL
- capacitor
- voltage regulators
- transistors

## Digital electronics

- microcontroller
- difference between microprocessor and microcontroller
- significance of sensors
- LDR
- IR sensors
- potentiometer n switches
- ultrasonic sensor



D-60-A, DDA Flats, Raghubir Nagar Delhi New Delhi -110027

- temperature sensor
- accelerometer n gyroscope
- GPS
- TRIAC
- LCD
- LED

## GSM module (Explanation & programming)

- Interfacing of GSM
- Principal and logic of how GSM works.
- Difference between Quad band and Dual band

## AT Commands (Explanation & programming)

- Introduction to AT command
- Working of AT commands
- What is AT Firmware

#### **Hyper Terminal**

- Introduction to Hyper terminal
- Working of Hyper Terminal
- Use of Hyper Terminal

# **Project List**

- Interfacing GSM module with Hyper terminal
- Check Network status on Hyper Terminal
- Select Network from Hyper Terminal
- Get Acknowledgement from network provider
- Make a call from HyperTerminal
- Receive a call from Hyper Terminal
- Send SMS from Hyper Terminal
- Read SMS on Hyper Terminal