



Workshops Brochure

Contact:

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Wordpress - Website Making, Digital Marketing, and How to earn Money Online (Hands-on)



Workshop Content

1. Introduction to Web Development.
 - Technologies used to make a website
 - Difference between a blog and self-hosted website
2. Requirements of making a website
 - Domain name**
 - Hosting/Server**
3. Introduction to WordPress
 - **Intro on various CMS**
 - What WordPress is?**
4. Installing WordPress on server
 - Buying domain and hosting
 - Linking Domain to server
 - Installing WordPress (1-click install and manual install)**
5. Learning WordPress control panel
 - Dashboard
 - Writing first post
 - Adding Media (Photo/Video)**
 - Categories, Tags

- Creating pages
 - Themes
 - Dropdown menu
 - Plugins
 - Creating Users
 - And much more..
6. Taking Backup of website/blog
 - Automatic
 - Manual
 7. Introduction to Digital Marketing
 8. Email Marketing
 9. Content Marketing
 10. Google Webmaster
 11. Social Media Marketing
 12. Search Engine Optimization - on page/off page
 - Checking ranking, statistics**
 - Google page rank, Alexa ranking**
 - Improving Website's SEO
 13. **Monetizing your blog/website**
 - Types of advertisements**
 - Affiliate programs**
 - Google AdSense and other ad networks**
 14. **Other earning sources**

Participants are expected to bring their own Personal Computers as this Workshop is hands on
If not then the college or the Organizing Committee will provide labs with Internet Facility .

Course completion certificates will be provided by us to students.

Workshop Duration: 2 days (max 14 hours)

Price: 1100 INR Per student

Workshop takeaway kit includes:

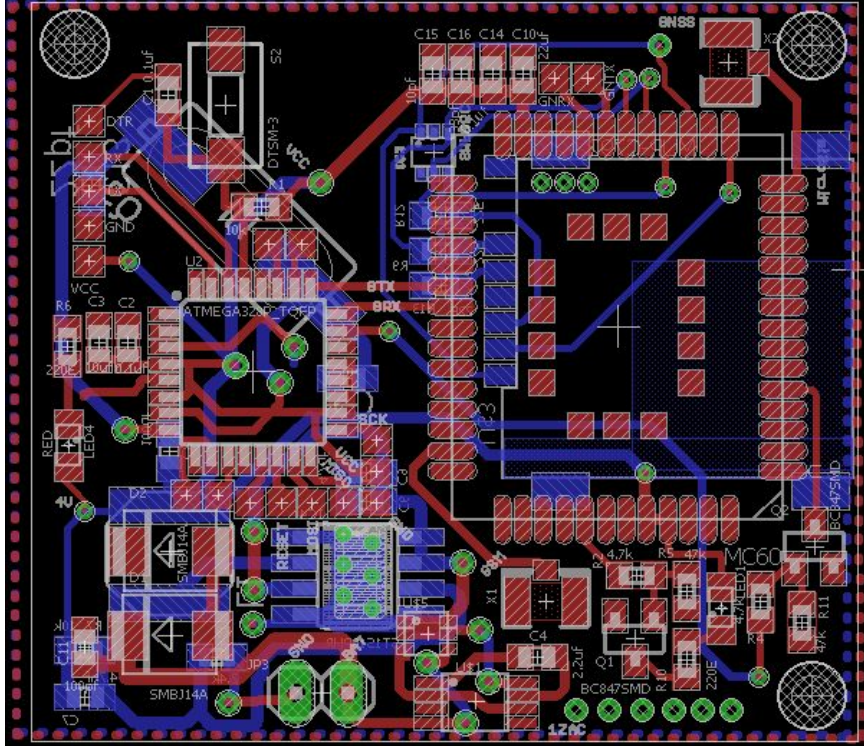
1. Wifi Module ESP8266 NodeMCU
2. PIR/Ultrasonic Sensor
3. DHT11 Temperature and humidity sensor
4. Relay
5. Breadboard
6. Jumpers
7. Tactile switch
8. Potentiometer
9. LED
10. Resistors

Group of 3 participants – One laptop per group compulsory
Certificate of Course Completion will be provided.

Workshop duration: 2 days (max 14 hours)

Price: 3300 INR (Group of 3 students)

PCB Designing Workshop



Workshop Course Content:

1. How is PCB manufactured from the designs
2. Introduction to Eagle and design process
3. Setting up Autodesk Eagle and activating free license
4. Drawing basic schematic. (Resistor, Capacitor, Inductor networks)
5. Understanding the use of different design tools available in schematic editor
6. Drawing the layout board based on the schematic
7. Understanding the use of different design tools available in board editor
8. Understanding the different device packages

9. Designing a power supply circuit
10. Drawing a 3-4 stage audio amplifier
11. Use of different layers in board design
12. Designing an arduino shield
13. Creating a custom library
14. RF circuit guidelines

Participants are expected to bring their own laptops as this is a Hands-On Workshop

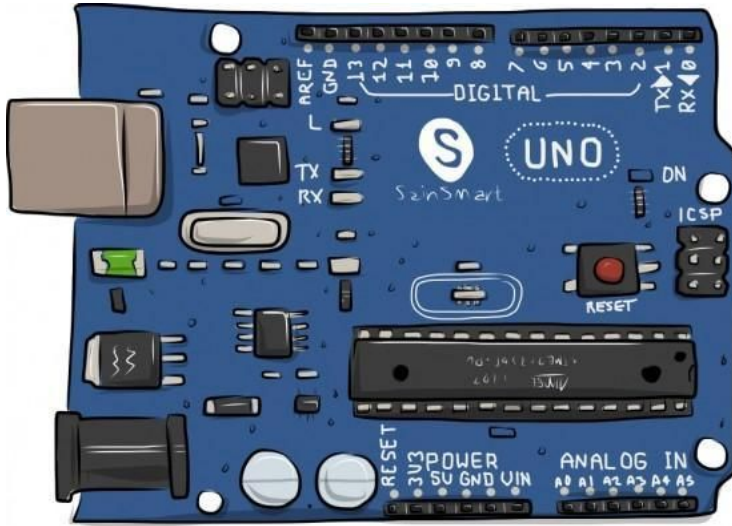
If not then the college or the Organizing Committee will provide labs with Internet Facility

Course completion certificates will be provided to every student

Workshop Duration: 2 days (14 hours including breaks)

Price: 990 INR per Student

Electronics Hacking and Home Automation with Arduino



ARDUINO UNO

Workshop Content:

1. Introduction to Electronics Hacking and Tinkering
2. Introduction to Microcontrollers and Microprocessors
3. Microcontrollers and their types(All about Microcontrollers)
4. Introduction to Arduino
5. Why Arduino?
6. Types of Arduino
7. Pin architecture of Arduino
8. Programming a Arduino
9. Blinking a LED
10. Blinking a Series of LEDs
11. Introduction to LCD displays
12. Programming a 16x2 LCD display
13. Introduction to Infrared sensors
14. IR transmitter and Receiver
15. Coding a IR transmitter

16. Basics of Serial Communication
17. Introduction to Relays
18. Hacking into a Bulb/Tube light
19. Sensors for Home Automation
20. Introduction to Ultrasonic Sensors
21. Interfacing a Ultrasonic Sensors
22. More on Sensors
23. Documentation of Circuitry
24. Introduction to Fritzing

Workshop Kit includes:

1. Arduino UNO
2. Ultrasonic Sensor HC-SR04 x 2
3. Bluetooth Module HC-05
4. TSOP 1738
5. Infrared Remote
6. 16 x 2 LCD module
7. Relay Module 5 volts DC to 230 Volts AC
8. Male to male/ Male to Female Jumpers
9. Bread Board
10. LED
11. Resistors

Group of 2-3 Participants – One laptop per group compulsory

Certificate of Course Completion will be provided.

Workshop Duration: 2 days (max 14 hours)

Price: 3300 INR(Group of 3 Students)

Complete Linux Administration



Workshop Content:

1. Introduction
 - History
 - Features
 - Why use command line?
2. Installing Linux Distribution
3. All about the Linux Shell
4. Getting help in Linux
5. Basic Commands
6. Navigation & File management
7. Expansions - To get data or list files/folders
8. Linux I/O Redirection
9. Permissions in Linux
10. Processes/Task
 - Startup processes

-Launching task with command terminal

-Killing task

11. Package manager - Installing, uninstalling, cleaning etc
12. Storage Media - Partitions & File systems
13. Networking - IP address, network interface, host port
14. Archiving & Compression
15. Compiling Programs through terminal
16. Shell Scripting & VIM editor
17. Automation using Cron Jobs

Any student who has no or very basic knowledge of Linux can attend this workshop. It is a complete hands-on workshop where each student performs all the task given by the tutor.

Workshop Duration: 2 days (14-16 hrs)

Fees per student: 990 INR

Android Development Course - Kickstarter



Workshop Content

1. Java Object Oriented Programming basics w.r.t. Android development
 - Classes
 - Constructors
 - Overloading
 - Variables etc.
2. Android Studio tour & basics
 - App setup
 - ADB
 - LogCat
 - Signing keys etc.
3. Android SDK, API Levels, etc
 - Android versions
 - Understanding SDK
 - Support library
4. Android Layouts
 - Linear
 - Relative
 - Constraint
5. Android Activity, Fragments
 - Understanding activity & fragments, the difference between these two

6. Android Widgets
 - Textview
 - Buttons
 - Edittext
 - Switches
 - Floatingaction buttons
 - Handling clicks
 - Handling visibility
7. Android RecyclerView View and RecyclerView Adapter
 - Showing Lists using recyclerview
 - What is recycler adapter
 - Previous versions of showing lists
8. Material design guidelines
9. Library integrations
 - What is a library
 - How to integrate in the app
 - Integrations of firebase library
10. Firebase Authentication
 - Why firebase?
 - Setup Firebase project
 - Adding firebase authentication
11. Firebase Realtime database
 - What is realtime database
 - Setup realtime database
 - Add realtime database to the app

Project: You will build a clone of **Google Keep app**. The app will help you build your notes and todo lists and sync with firebase realtime database. Using firebase authentication, you will be able to sync your notes across any device. The project will help you implement everything learnt during the workshop.

Note: Students are required to download and install Android Studio software in their laptops before coming to the workshop. If it is organized in the lab, the same pre-installation criteria applies so that not much time is spent on installations.

All the students attending the workshop get a **course completion certificate from Sigmaflux** along with any necessary software material required. Post workshop assistance will be provided.

Duration: 2 days (14-16 hrs)

Fees: 1200 INR