

# Robotics

Learn "How to make Android Controller Car"

## Introduction to Robotics

- Introduction to Robotics
- Types of Robot according to application
- Market exposure robotics
- Introduction to Embedded System
- What is embedded
- Use of Embedded in our life

## Introduction to Basic Electronic

- Analog Electronic:
  - Basic of Bread Board, Resistor, Capacitor
  - Voltage divider circuit
  - Testing with multimeter
  - Types of Switches
- Digital Electronic:
  - Logic gates
  - Basic of counters
  - Introduction to various general purpose IC
  - Power Supplies
  - Building a standard voltage supply
  - Regulated DC voltage Supply

## Sensor, Actuator & Microcontroller

- Sensor and Actuator
- Mechanism used by sensor
- Line sensing, temperature sensor, Distance Measurement
- Motors
- Motor Drivers
- Introduction to microcontroller
- Overview of Microcontroller
- Application & Scope of microcontroller
- Introduction to AVR Architecture
- Familiarization with various addressing Modes of Atmega 16

## Embedded C

- Programming Technique (Low level/ High level/ Very High Level)
- Description of various function of Embedded C
- Working on Simulator

## Interfacing with Microcontroller

- LED
- Motor Driver IC
- LCD
- IR Sensor
- Advance Sensor
- Buzzer
- Relay
- DTMF IC
- Communication using a mobile personal computer
- Brushing up TTL logic communication
- Communication without developing application (using Hyper Terminal)
- Serial Communication
- GSM Protocol
- ZigBee Protocol
- RF communication
- 10. Mechanical Assembly
- Trouble Shooting Techniques
- 11. Working on Arduino
- Atmega 328P
- Bluetooth
- Wifi
- Android controlled bots

## Raspberry PI

- Installation
- Usage
- IoT
- Python in Raspberry PI
- GPIO of Raspberry Pi
- IFTTT

**Project:** Android controlled bots

# Thanks

For any queries  
Please contact Us: