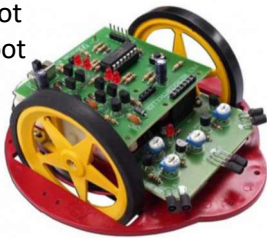


# TRAINING MODULES

## 1. BASIC ROBOTICS

### PROJECTS

Intro to Basic Electronics & Arduino  
LED Array  
RGB LED  
Buzzer  
Seven Segment Display  
Relay Control  
LDR  
Line Follower  
Obstacle Avoider  
Wall Follower  
Edge Avoider  
Computer Controlled Robot  
IR Remote Controlled Robot



### BENEFITS

You will be gaining :-

- An in-depth knowledge about the basics of the robotics and electronics
- The knowledge about what, when, where, how and why of all the components used in this project
- Developing problem solving skills
- Developing creativity and imagination

## 2. INTERMEDIATE ROBOTICS

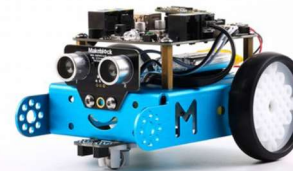
### PROJECTS

All of the Basic Robotics projects  
Interrupt Handling in Arduino  
Programming with Port Manipulation  
LCD Integration  
Ultrasonic Range Finder  
RF Remote Controlled Robot  
Servo Motor Control  
SPI and I2C Protocol  
Wi-Fi Robotics  
Obstacle Avoider with Ultrasonic Sensor  
Gesture Robotics  
Home Automation

### BENEFITS

You will be gaining :-

- Design and build your own RC Car and control it with Wi-Fi and Hand Gestures
- Developing programming/coding skills
- Learn the concept of Home Automation and convert your Home to Smart Home
- Control your Home from anywhere around the world with just a click



## 3. ADVANCED ROBOTICS

### PROJECTS

All of the Basic Robotics projects  
All of the Intermediate Robotics projects  
Self-Balancing Robot  
PCB Designing and Fabrication  
Soldering Techniques  
RC Micro Quadcopter  
RC Micro Plane



### BENEFITS



You will be gaining :-

- The skill of designing Printed Circuit Board
- The skill of soldering
- Learn all the introductory concepts of aeronautical engineering through aeromodelling
- Learn all concepts of UAV Development and Engineering
- Learn about stability and control of Drones
- Hands-on experience with model Aeroplane and Drones
- Design, Build & Test your first RC Aircraft from scratch!

**REQUIREMENTS:** PC(Laptop/Desktop) & **LOTS OF PASSION**

\*Take-away kit will be provided to participants depending on the type of course they select. This is done to reduce the cost of the program and make it affordable for students who do not want to buy the take-away kit.

**ELIGIBILITY:** Anyone who is really passionate about creating something from the world of imagination