

Robotics & Coding Pro Course

About Course:

The course will introduce your kids to Coding with Robotics. They will learn real text based coding and make robots using Robotics Hardware with the help of our advance Robotic Kit Based on Arduino & Sensors.

Duration: 50 days (May vary according to students learning pattern)

Session Type: 1 ON 1 Session (1 Faculty and 1 Student Policy)

Requirement: Robotic Kit, Laptop, Headphone, Internet with stable connection

Course Fees: 24,999/- (Including Robotic Kit & Shipping Charges)

Certification: Yes

Session Frequency: Twice a Week

Session Duration: 1 Hour

Course Content:

- 1) What is Robot & Robotics ?
- 2) Brain of Robot- Arduino
- 3) Software Download & Installation
- 4) Introduction to Communication System
- 5) Types of Communication
- 6) Explanation of Datatypes
- 7) Explanation of Variable
- 8) Explanation of Software & 1st Program
- 9) Steps for making program
- 10) Explanation of Input and Output using human body example
- 11) Explanation of Digital Devices
- 12) Program for Output Devices
- 13) **LED Blinking Program**
- 14) **5 LED Module Program**
- 15) Introduction to C language
- 16) Writing Codes for C language in Code Blocks
- 17) Explanation of Printf Function
- 18) **Print your Bio-Data**
- 19) Program for Input Devices
- 20) Explanation of Push Button
- 21) Push button – Value read on Serial monitor
- 22) Introduction to Conditional Statement
- 23) **Push button- led & buzzer on/off**
- 24) **Public Counter using Push Button**
- 25) IR Sensor – Value Read on Serial Monitor
- 26) **IR Sensor LED On- off**
- 27) **Public Counter using IR Sensor**
- 28) Explanation of Relay – Electromagnetic Switch
- 29) **Automatic hand Sanitizer Dispenser**
- 30) Understanding of PIR sensor – Value Read on Serial Monitor
- 31) **Motion Detected Home Security System**
- 32) **PIR sensor-Counter value print on Serial Monitor**
- 33) Explanation of Potentiometer(Variable Resistor)
- 34) Potentiometer – Value Read on Serial Monitor
- 35) Introduction to logical Operator(&&)
- 36) **Potentiometer-5 leds & buzzer on/off**
- 37) **Potentiometer Values-voltage conversion using Float Variable**
- 38) Introduction to Car Mechanism and Programming for two motors
- 39) Explanation of Motor Driver Module & 7805 Module

- 40) **Automatic car (5 second forward/backward/right/left/stable car)**
- 41) Explanation of Joystick Module
- 42) Joystick – Value read on Serial Monitor
- 43) **5 leds on/off using Joystick**
- 44) **Joystick operated Robot**
- 45) Explanation of Accelerometer
- 46) Accelerometer-Values read on Serial Monitor
- 47) **Accelerometer-5 leds on-off**
- 48) **Gesture Control Robot**
- 49) **Computer Operated Robot using Serial Monitor**
- 50) Introduction to Serial Communication
- 51) Arduino-Serial Interfacing
- 52) Explanation of Bluetooth
- 53) Download Arduino Bluetooth Controller app
- 54) **Bluetooth-13 no.led on-off**
- 55) **Bluetooth-5 leds on-off**
- 56) **Bluetooth Operated Robot**
- 57) Introduction to Relay- Electromagnetic Switch
- 58) **Home Automation using Bluetooth & Relay**
- 59) Introduction to Flag Variable
- 60) **Flag variable -13 no. led on-off using Bluetooth**
- 61) **Flag variable -5 leds on-off using Bluetooth**
- 62) Understanding of Smoke Detector
- 63) **Smoke Detector -13 no. led on-off**
- 64) **Smoke Detector – 5 leds & Buzzer on-off**

FAQ

How Many Robots / Systems My kid will make?

26 Different Robots or Automatic System

Will My Kid work on Robotic Kit?

Yes

Will My Kid Apply Coding Skills to Hardware?

Yes, we have designed course in that way only

Is there any Demo/ Trial Class Available?

Yes, we provide 2 demo classes as we believe in 100% satisfaction Policy, if your kid is not able to understand the logic in 2 Demo classes than after receiving of Robotic Kit we will refund 100%

Will Student Require Robotic Kit?

Yes

Who Will Provide Robotic Kit?

Robotrix India

Is Robotic Kit Cost Extra?

No, it's including in course fees

Who will pay shipping charges for Robotic Kit?

Robotrix India

What Skills are required to do the Course?

Basic computer knowledge required for this course