



# ROBOTRIX INDIA

## PRESENTS

# Robotics & Coding Pro Courses



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[robotrix.in](http://robotrix.in)



## **About Robotrix India:**

**Robotrix India is an institute where curious minds from age 8-years to a grown person of age 80-years can learn many latest hands-on applications of the Robotics, Automation and Sensors with different programming and coding languages like C, C++, JAVA, Python and Controllers, under the guidance of experienced faculties. We are providing advance Robotic Kit to our students to explore their logic and creativity more. We follow STEM (science, technology, engineering, and mathematics) education system with priority more on practical applications.**



## **About Course:**

The course will introduce your kids to **Coding with Robotics**. They will learn real text based coding in C language and make codes in code blocks software and student will interface Digital, Analog & Serial Devices with Arduino. They will make **26 Different Robotic or Automatic Projects** using C language & our advance Robotic Kit based on Arduino & its Sensors.

# Course Content:



- **What is Robot & Robotics ?**
- **Brain of Robot- Arduino**
- **Software Download & Installation**
- **Introduction to Communication System**
- **Types of Communication**
- **Explanation of Datatypes**
- **Explanation of Variable**
- **Explanation of Software & 1st Program**
- **Steps for making program**
- **Explanation of Input and Output using human body example**
- **Explanation of Digital Devices**
- **Program for Output Devices**
- **LED Blinking Program**

# LEARN CODE & MAKE

- **5 LED Module Program**
- Introduction to C language
- Writing Codes for C language in Code Blocks
- Explanation of Printf Function
- **Print your Bio-Data**
- Program for Input Devices
- Explanation of Push Button
- Push button – Value read on Serial monitor
- Introduction to Conditional Statement
- **Push button- led & buzzer on/off**
- **Public Counter using Push Button**
- IR Sensor – Value Read on Serial Monitor
- **IR Sensor LED On- off**
- **Public Counter using IR Sensor**

# LEARN CODE & MAKE

- **Explanation of Relay – Electromagnetic Switch**
- **Automatic hand Sanitizer Dispenser**
- **Understanding of PIR sensor – Value Read on Serial Monitor**
- **Motion Detected Home Security System**
- **PIR sensor-Counter value print on Serial Monitor**
- **Explanation of Potentiometer(Variable Resistor)**
- **Potentiometer – Value Read on Serial Monitor**
- **Introduction to logical Operator(&&)**
- **Potentiometer-5 leds & buzzer on/off**
- **Potentiometer Values-voltage conversion using Float Variable**
- **Introduction to Car Mechanism and**
- **Programming for two motors**

# LEARN CODE & MAKE

- Explanation of Motor Driver Module & 7805 Module
- Automatic car (5 second forward/backward/right/left/stable car)
- Explanation of Joystick Module
- Joystick – Value read on Serial Monitor
- 5 leds on/off using Joystick
- Joystick operated Robot
- Explanation of Accelerometer
- Accelerometer-Values read on Serial Monitor
- Accelerometer-5 leds on-off
- Gesture Control Robot
- Computer Operated Robot using Serial Monitor
- Introduction to Serial Communication
- Arduino-Serial Interfacing
- Explanation of Bluetooth

# LEARN CODE & MAKE

- **Download Arduino Bluetooth Controller app**
- **Bluetooth-13 no.led on-off**
- **Bluetooth-5 leds on-off**
- **Bluetooth Operated Robot**
- **Introduction to Relay- Electromagnetic Switch**
- **Home Automation using Bluetooth & Relay**
- **Introduction to Flag Variable**
- **Flag variable -13 no. led on-off using Bluetooth**
- **Flag variable -5 leds on-off using Bluetooth**
- **Understanding of Smoke Detector**
- **Smoke Detector -13 no. led on-off**
- **Smoke Detector – 5 leds & Buzzer on-off**





**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

# 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**



**FOR  
REGISTRATION**



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## **OUR BRANCHES**

**1,Skylon Tower, Nr. Gulbai Tekra BRTS Stop, Opp  
Jhanvi Restaurant, University Road, Ahmedabad**

**C1/ 403,404 Celebration City Center, Opp. Chitvan  
Bungalow, South Bopal Main Road, South Bopal,  
Ahmedabad**