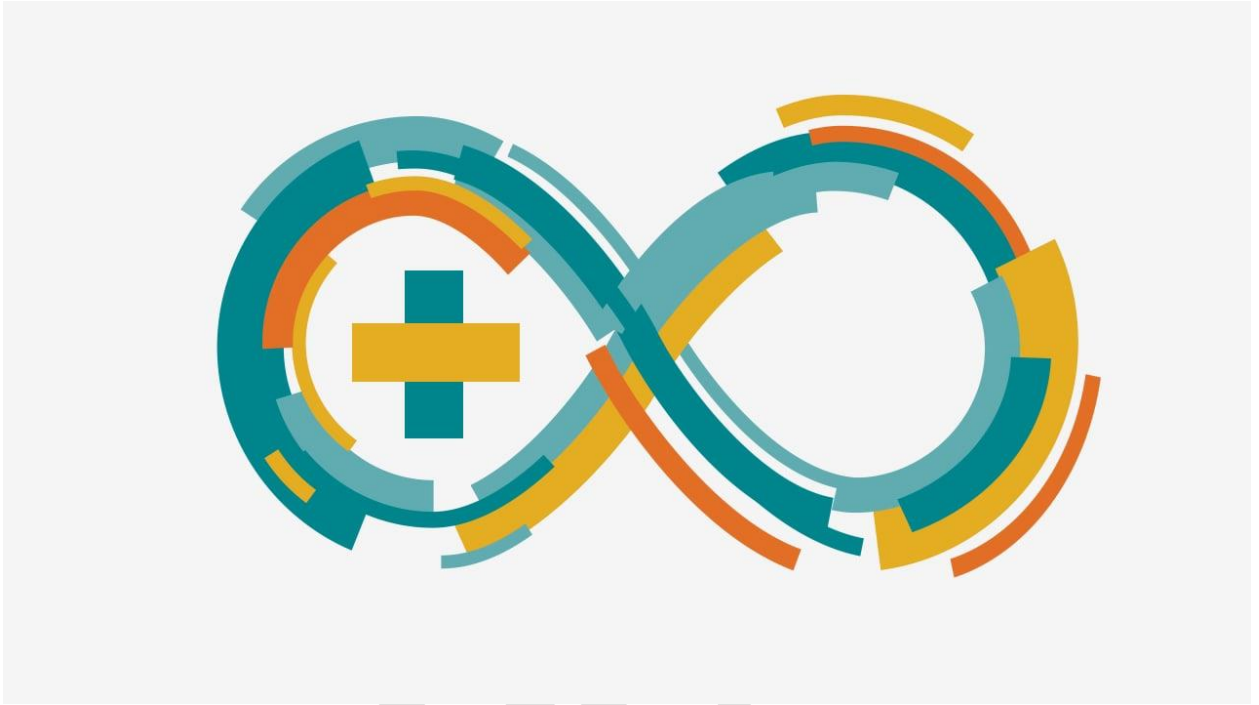


# The Robo-King



## Course Details:

The course is specifically designed for schools students.

This course offers with the ability to master the technology of Robotics from scratch. The course dives deeper into the field giving you a proper understanding of all things that go into making a Robot. At Technol we believe in creating robots that will solve many problems and you can be their king.

We cover the following topics under **The Robo-King** module:

## Module 1: Introduction to Robots

- What are Robots?
- Components of Robots?

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[www.technolsolutions.info](http://www.technolsolutions.info)

- Applications of Robots?

## **Module 2: Brain of Robot**

- Introduction to Micro Controller
- Structure of Micro Controller
- Arduino: Introduction
- Installing Arduino IDE and Sketch overview

## **Module 3: Programming for Arduino**

- Learn to Code
- Write your first program

## **Module 4: How to glow LED**

- Basics of LED
- Programming of LED
- Blinking of LED
- Blinking of EVEN and ODD states of LED
- Project: Traffic Light System

## **Module 5: Playing with buttons and Buzzers**

- Overview of Buttons and buzzers
- Programming of buzzers
- Playing Buzzer sound

## **Module 6: Sensing of Light**

- Types and Working of Sensors
- Basics of IR sensors
- Working of IR sensors
- Interfacing IR sensors with Arduino
- Calibration of IR sensors
- Controlling LED using IR sensor

## **Module 7: How a Robot Moves**

- Basics of DC motors
- Working of DC motors
- Motors & Motor Drivers
- Interfacing motors with Arduino
- Controlling motors with Arduino

## **Module 8: Build your First Robot**

- Structure of Robot
- Assemble the Chassis of Robot
- Integrate Arduino and Motor drivers to Chassis

## **Module 9: Creating a Line Follower**

- What is a Line Follower
- Working of Line Follower
- Logic for Line Follower Robot
- Programming for Line Follower Robot
- Creating a Line Follower

- Applications of Line Follower

## **Module 10: Obstacle Avoiding Robot**

- What are Obstacle Avoiding Robot?
- Ultrasonic Sensors
- Interfacing
- Logic and Programming
- Connections and Calibration
- Testing the Robot

## **Module 11: Mobile Controlled Robots**

- What is Mobile Controlled Robot?
- Bluetooth Module
- Interfacing
- Logic and Programing
- Connections and Calibration
- Testing the Mobile Controlled Robot

**\*24x7 query solving support through whatsapp groups\***

**\*Hardware kit included for practice and projects\***

**\*Students can but kits at discount price\***