



Junior Robotics

| Technology | Duration | Project Base |
|-----------------|-------------------------|---------------------|
| Junior Robotics | 7 Days 2 Hrs. per day | Hardware & Software |

What is Robot?

- Introduction of Robot
- Types of Robot
- Future of Robot

Applications of Robotics.

- Industrial applications
- Domestic applications
- Commercial applications

Basic of electronics (Explain Practically)

- Resistor
- Capacitor
- Diode
- Voltage Regulators
- Potentiometer

Motors and Actuators interfacing.

- DC motor
- DC gear motor
- Stepper motor
- Servo motor

Introduction of TINKERCAD

- Basic Component in Tinker cad
- Online Circuit Designing
- Circuit design of basic components.
- Input and output device interfacing.



Practical on Bread Board.

- Introduction of Breadboard
- Bread boarding
- LED Pattern
- Simplification of complex circuit.

Projects Covered

- Basic project with LED.
- Push Button & Slide switch Operation.
- Practical use of variable Resistor.
- Practical use of buzzer and DC motor.
- Manual traffic light.
- Remote control Robot.

Kit Content

- Remote Controller
- Resistance
- Potentiometer
- Leds
- Buzzer
- DC Motors
- Wheels
- Nut bolt pack
- Long wire
- Connecting wire
- screw driver
- Castor Wheel