

## **Robotics Training Syllabus - 1**

Introduction to Robotics

Robotics Applications

Introduction to different types of robots(Manual & Autonomous)

Introduction to Microcontrollers

Usage of Microcontrollers in Robotics

Introduction to Arduino

Choose your microcontroller

What is ADC & DAC

Why Arduino for Building Robotics Applications

Advantages of using Arduino

Programming concept for Arduino

Logic Building

Introduction to Embedded System

Build your first Embedded Code

## **Robotics Training Syllabus - 2**

Concepts of Different types of sensors

Application of different sensors

Interfacing with single sensor

Interfacing with multiple sensors

ADC conversion logic

Application of ADC

Motor drive concept

Relay interfacing with microcontroller

Motor interfacing with microcontroller

What is PWM

PWM generation and its application using microcontroller

Steps to build your first robot

Assemble your first robot

Programming your first robot

Troubleshooting your program

Run your first robot

## **Robotics Training Syllabus - 3**

What is Autonomous System

Designing an Autonomous System

Make your first Automatic Robot

Troubleshooting Robot

More Robotics Projects