Topics to Be Covered during Training
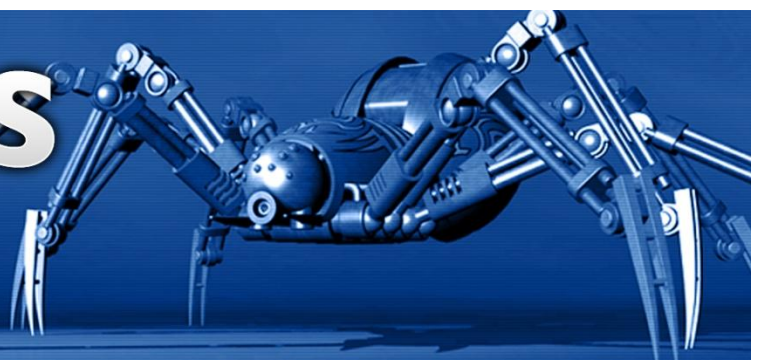
- Basics of Electronics
  * Practical understanding of all major electronic Component.
  * Working with Resistance, Diode, capacitor, LED, ZENER, Basic ICs
- Embedded System design
  * Introduction to micro controller
  * What is a micro controller? What's inside it?
  * What makes it an embedded system?
  * What are the different families of microcontroller, its derivatives and its applications in industrial projects?
  * Why AVR is the most widely used micro controller family?
- Introduction about Arduino
  * Starting with embedded systems
  * AVR Microcontroller Programming
  * Arduino jargon and terms
  * Arduino Basics
  * Arduino Architecture
  * Arduino board layout. What are the resources available
- Programming fundamentals (C language)
- **Project 1:** Simple LED Program
- **Project 2:** LED Blinking
- **Project 3:** RGB Interfacing & Traffic Light Control
- **Project 4:** IR Sensor, DC Motor Interfacing & Automated Door Opening System
- **Project 5:** Controlling Direction of Motor (Forward, Reverse)
- **Project 6:** LCD Interfacing
- **Project 7:** Interfacing Bluetooth Module
- **Project 8:** Control Electronics Devices using Android Smartphone & Arduino
- **Project 9:** Voice Controlled Home Automation System.
- **Project 10:** Gesture Controlled Home Automation.
- **Project 11:** Interfacing 7 Segment Display
- **Project 12:** Interfacing Keypad with Arduino
- **Project 13:** Interfacing Analog Sensor
- **Project 14:** Interfacing Temperature & Humidity Sensor
- Robot Assembling
- **Robot 1:** Line Follower Robot

- **Robot 2:** Obstacle Avoider Robot
- **Robot 3:** Android App Based Controlled Robot over Bluetooth
- **Robot 4:** Voice Controlled Robot
- **Robot 5:** Gesture Controlled Robot using Android Smartphone
- **Robot 6:** Edge Avoider Robot

Eligibility Criteria: Electrical, Electronics, Instrumentation Engineering Students. Students entering into 2nd Year to Final Year Students can participate in this training Program. However students from any branch can participate in this training program.

Got Quotations? Contact us

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