Embedded Technosolutions

Venture of IIT Bombay & VJTI Alumni

3 **Times IIT Bombay Robo Competition Winner**

Embedded Systems with Arduino

Learn

Think

Winter
Training
Program
2016

Execute

Get the experience of learning with IIT Bombay & VJTI Alumni with

Internship Certificate

Practical & Professional Training on Arduino

Course Syllabus

Chapter 1

1.1 Introduction to Embedded System with Arduino

1.2 Scope of Arduino in Embedded Systems

Chapter 2

2.1 Introduction to Arduino series

2.2 Hardware architecture of Arduino controller Series

2.3 Controller I/O ports

2.4 Memories of controller

2.5 Concept of Serial communication ,Interrupt etc.

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Website   : www.embeddedtechnosolutions.com
Our Branches : Thane,Nerul & Malad

Chapter 3

3.1 Introduction of Embedded Arduino Software

3.2 Introduction of Embedded C Programming and programming concepts for Arduino

3.3 Introduction of program flashing and error correction

Chapter 4

4.1 I/O interfacing concept

4.2 Led Blinking logic and delay generation routine

Chapter 5

5.1 Character LCD 16x2 interfacing logic and concept

5.2 Introduction of LCD command and data signals

5.3 LCD based programming

5.4 Practical project based on character LCD

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Chapter 6

6.1 Matrix keypad interfacing logic and concept

6.2 Introduction of key pad interfacing using polling method

6.3 Matrix keypad programming

6.4 Practical project based on matrix keypad

Chapter 7

7.1 Introduction to serial communication

7.2 Serial communication concept

7.3 Introduction of serial communication firmware and registers

7.4 Serial communication programming

7.5 Practical application based on Serial communication

Chapter 8

8.1 Introduction of interrupts in controller

8.2 Interrupt logic and concept

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8.3 Interrupt routines / programming

8.4 Key interfacing using interrupt

8.5 Practical application based on interrupt

Chapter 9

9.1 Introduction of ADC

9.2 ADC interfacing

9.3 ADC programming

Chapter 10

10.1 Introduction of DTMF mobile technology

10.2 DTMF technology interfacing in real application

10.3 DTMF programming

10.4 Practical project design based on DTMF technology with Arduino

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Chapter 11

11.1 Introduction to RF & RFID communication

11.2 RFID technology interfacing in real application

11.3 RFID module programming

11.4 Practical project design based on RFID technology with Arduino

Chapter 12

Practical designing of a project based on above technology with Arduino

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Our Previous workshops

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