



Indeyes Infotech Pvt Ltd

EMBEDDED SYSTEMS-TRAINING MODULE

INTRODUCTION TO EMBEDDED SYSTEM

- History & need of Embedded System
- Basic components of Embedded System
- Hardware Classification of Embedded System
- Programming Language Classification of Embedded System
- Applications and future aspect of Embedded System

MICROPROCESSOR & MICROCONTROLLER CLASSIFICATION

- Difference between Microprocessor & Microcontroller
- Classification based on architecture
- Classification based on Instruction Set
- Type of Microcontroller
- Memory Classification

INTRODUCTION AVR MICROCONTROLLER

- AVR microcontrollers
- History of AVR
- Introduction of AVR family
- Special features of AVR

INTRODUCTION OF ATMEGA16

- Pin Description of ATMEGA16
- Architecture of ATMEGA16
- Features of ATMEGA16

REGISTERS AND MEMORY OF ATMEGA16

- RAM of ATMEGA16
- ROM of ATMEGA16
- General purpose registers
- Special function registers



Indeyes Infotech Pvt Ltd

INTRODUCTION TO C PROGRAMMING

- Basics of C
- Looping, Branch instructions
- Embedded C

INTERFACING OF LED USING AVR

- Introduction of LED's
- Interfacing Circuit Description of LED's
- Programming of LED's Interfacing

INTERFACING OF SEVEN SEGMENT DISPLAY USING AVR

- Introduction to 7 Segment Display
- Interfacing Circuit Description of 7 Segment Display
- Programming of 7 Segment Display Interfacing

INTERFACING OF LCD

- Introduction to 16 x 2 LCD
- Interfacing Circuit Description of 16 x 2 LCD
- Programming of 16 x 2 LCD
- Introduction to 16 x 4 LCD
- Custom Character Display on LCD

INTERFACING OF MOTORS(DC and STEPPER Motor)

- Introduction to Motors
- Types of Motors used in Embedded System
- Programming & Controlling of motors in AVR

INTERFACING OF SWITCH and BUZZER

- Introduction to Switches and Buzzer
- Programming & Controlling devices using switches in AVR

TIMERS & COUNTER PROGRAMMING

- Introduction to Timer & Counter
- Difference between Timer and Counter
- Description of SFR associated with Timer & Counter
- Programming of Timer & Counter



Indeyes Infotech Pvt Ltd

SERIAL COMMUNICATION PROGRAMMING

- Introduction to Serial Communication
- Types of Serial Communication
- Description of SFR associated with Serial Communication

INTERRUPT DRIVEN PROGRAMMING

- Introduction to Interrupts
- Types of Interrupts
- Programming of Software & Hardware Interrupts

INTERFACING OF SENSORS

- Interfacing of Sensor with Microcontroller
- LM358
- IR Sensors

Software's

- BASCOM/AVR Studio/Code Vision
- Proteus ISIS Professional

Course: Embedded System and Robotics (AVR)

Certificate: Training Certificate (ISO Certified)

FOR MORE INFORMATION

Contact: +91-9691160716, +91-9907681635

Mail us: indeyesinfotech@gmail.com

Website: www.indeyes.com