

Workshop on MCS 51 family uC, Arduino and Embedded C

Educational Programs

Embedded system Development

PCB Design and Development

Technical Skill Development Program



About Us:

MDB Electrosoft is conducting training program from last four years we provide industry oriented training which helps to integrate academics with real time corporate world.

Our Mission is to develop the technically sound, well skill students for industries and create maximum employment.

MDB Electrosoft is grooming electronics and software product Development Company. We develop electronics and software products which help society to make life easy and interesting. Our team is always dedicated for the Development and Innovations. Our research in a product development makes the product outlined as per client requirement. Our development strategy gives throughput which inclined with the user requirements. Our vision is to develop society oriented products which always dole out better life. Our economic policies give lot in less. Our product development starts from user's requirement and ends on efficient and well—develop product. Our team has well experience and skilled experts who are able to give efficient and in time solution. Every solution provided by us is unique and innovative. Our approach has been always customer and market communication centric. We create products keeping our target consumer and audience in mind. Our expertise always focuses on market requirement and development.





What is Project Development Training Program?

We have started project development training program for the Engineering, Polytechnic as well as for Professional students. The concept behind this program is to provide Practical project development training, so that students get interact with latest project development strategy and emerging technologies. Our vision behind this program is to build the students technical skill required for the actual project development in industry. This program provides platform for the student to implement their ideas.

Our Products:

- Electronics product
 - 1. Advance theft alert system (Patented)
 - 2. Home automation through remote control.
 - 3. Controlling of Water Pump by cell phone.
 - 4. Flush control system.
 - 5. Educational Trainer Kit
- Software Products.
 - 1. www.mahavidyalay.in
 - 2. E-attendance.
 - 3. MLM Software
 - 4. ERP software

Our Services:

• Hardware system development as per requirement

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- Software development as per requirement
- Web Development
- PCB development
- Domain and hosting services
- Adroid app. Development

Contents of Embedded System Training Program (MCS 51 family Controller)

Sr. No.	Торіс	Duration
1.	Introduction to Embedded System	0.5 hr
2.	Introduction to MCS 51 family microcontroller	0.5 hr
3.	Introduction to architecture Different port functioning (pin diagram)	0.5 hr
4	Introduction to microcontroller practical board	0.5 hr
5	Introduction to Keil (Embedded C programming and debugging software)	2 hr
6	Introduction to Embedded C Data types in Embedded C Syntax for loops in Embedded C	2 hr
7	Introduction to Proteus (simulator to simulate hardware prototype)	1 hr
8	Design of microcontroller based circuit using Proteus.	1 hr
9	i) Programming for dancing LEDs. ii) Design of Delay subroutine as per requirement. iii) Changing LEDs Dancing pattern using micro switch by polling.	1.5 hr
10	Interfacing of driver circuit and relay and its programming	1 hr
11	Interfacing of sensors and its programming.	1 hr
12	Introduction to interrupt and timer i) Changing LEDs Dancing pattern using micro switch by interrupt.	1 hr
13.	ii) Delay programming using timer. Counter deign by 7 seg. Display (Mini Project)	1 hr.
14	Mini project to count the no. of persons	1 hr.
15	Mini project Automatic street light control	1.5 hrs.
16	 Interfacing of LCD with microcontroller. Programming of LCD through microcontroller Programming for initialization of LCD using different command words. Programming to display the alphabets and numbers on LCD. Programming to display the alphabets and numbers on LCD using lookup table. 	2 hrs.
17.	Water level indicator	1 hr.

18.	 Introduction to serial communication and its programming a) Interfacing of microcontroller board with PC through serial communication. b) Programming to receive data from pc keyboard and display it on LCD. 	2 hrs.
19.	Programming logic and programming for obstacle detector robot. Programming logic and programming for line follower robot.	1 hr.
20	Introduction to assembly level language. Difference between asm and embedded C language Introduction to simulator (Program Studio) for asm.	1 hr.

Arduino and Embedded C

Course Content

Sr. No.	Content	Duration	
1.	Introduction to Arduino board	0.5 hr	
2.	Installation of Arduino Software	0.5 hr	
3.	Pin mapping of Arduino with ATMEGA 328/8	20min	
4.	Software Basics	0.5 hr	
5	Intefacing of LED with board.	0.5 hr	
6	Writing a program to on and off the LED with interval of 1 second		
6.	Interfacing of 7 segment displpay and its programming.	1 hr.	
7. 🥰	Interfacing of Buzzer to genrate different audio tones.	40 min	
8.	Interfacing of 16x2 LCD display and its Programming.	1.5 hr.	
	Writing program for different display patterns on LCD.		
9.	Intefacing of switch and LED to Board	1 hr.	
10.	ADC Programming	1.5 hr.	
	Writing a program to display analog voltage on LCD.	-DDRE'	
11.	Design of temperature indication and controlling System.	1.5hr.	
12	Water level indicator	1 hr.	
13	Home appliance control using remot	1.5hr.	
14	Display Name of student using 5 LEDs only *	1.5 hr.	
15	wireless controlling of robot via remot control*	1.5 hr.	
16	Line follower robot*	1.5 hr.	
17	Controlling firing angle of Triac	1.5 hr.	

Note: 1) Kit cost = Rs.2000/-

- *- The experiment in which * is mentioned, the kits will be provided only for experimental purpose.
- 2) For the group of three candidate Fees = Rs. 4500/- (Including Kit).
- 3) Group can be made maximum of four candidate.
- 5) Workshop will be of 7 days.
- 6)Trainner Team: Main Trainer 12 Year eperience (Teaching 8 years Industry 5 yeays)

: Two subordinate to solve the difficulties of students.

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4) Expected Entries of 20 group

Kit Include:

Embedded system Kit for MCS-51 familly controller

Arduino Board

Bread board

16X2 LCD

LM 35 Temperature Sensor

RC 5 Remot control

USB Cord

Buzzer

Switches

Resistor

LEDs

7 Seg display

Relay

Triac BT136

Key Features of Our Training Program:

➤ Well experience trainer

- Practical approach in each program.
- > Certificate to each participant
- > CD Material
- > Interaction with each and Every participant
- Offer a global platform for innovative developers (Internship Program)

Kit Provided:

: 1. Hardware Development Kit

: 2. Certificate

Contact Us @

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Our Venture





Our Products







WL-Operator



Farma Switch

Our Patent



Authority Alert System

Our Success Stories (2014-15)

Workshop On Mini Project & PCB Design @ PRMIT & R Banera,
Amravati









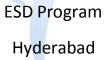




Workshop on Embedded system @ P.R. Pote Polytechnic











Android Workshop

Amravati





Skill Improvement Program
Secundarabad

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