

IEEE Workshop
on
**Embedded System Design using
PIC Microcontrollers**

20th and 21st Nov. 2008

Organized

by



IEEE

Instrumentation and Measurement Society
Bombay Section
and



Maharshi Karve Stree Shikshan
Samstha's

Cummins College of Engineering for
Women, Karvenagar, Pune
411 052

Ph. 020-25311000, 25311250, 25311251,
cell: 9921481197, 9763358298

Email: ajayd1967@yahoo.com

About the Institute

Maharshi Karve Stree Shikshan Samstha; founded by Bharatratna, late Maharshi Karve in 1896; with the aim of empowering women through education. The samstha runs 36 institutions. Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women, established in 1991, is a self financed leading engineering institute offering undergraduate programs in Instrumentation & Control Engineering, Mechanical Engineering, Computer Engineering, Information Technology, Electronics and Telecommunication. Recently the institute has received approval for the postgraduate programs in Instrumentation & Control and Electronics and Telecommunications, which are about to start from the academic year 2009. The institute is affiliated to the University of Pune and approved by AICTE New Delhi.

The institute has qualified faculty members and equipped with state of the art laboratories. One of the expertises available in the department is embedded designs. Therefore we propose a workshop on **embedded system design using PIC microcontrollers.**

About Workshop

PIC Microcontrollers are popular due to the strong built in peripheral support. There are a number of PIC devices by Microchip available today to meet the design requirements. This workshop on PIC microcontrollers provides required design skills to engineers who already working in industry and/or would like to start working on PIC microcontrollers. The workshop is being organized by **Instrumentation and Measurement society IEEE Bombay section** jointly with the Department of **Instrumentation and Control**, Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women, Pune.

Objectives:

After finishing the course the participants will be able to

- * write PIC 16F877 assembly language programs.
- * use the programming platform MPLAB
- * design a PIC microcontroller boards around 16F877

Contents:

PIC 16F877 Architecture, Registers, Memory Organization, Instructions, Addressing Modes, Programming,

MPLAB, Designing with PIC Microcontrollers, 16F877 board designing
Interfacing output devices:
LCD and LED Display, DC Motor Drive, Stepper Motor Drive, Light Dimmer
Interfacing Input devices: Keyboard, IC temperature sensor using of ADC module

Hands on experience on above interfacing circuits in the laboratory, including programming.

Who can register?

Participants from Industry and academics, with engineering background and knowledge of digital systems, may apply for the course.

Participation certificate will be given to all those who attend the course successfully

Fees:

Rs. 1000/- per participant for IEEE members and Rs. 2000/- for participants from industry and other members. This includes course material and lunch. Outstation participants have to make their own stay and travel arrangements; however at request organizers would help in doing so.

Organizing Committee:

- Prof. Ashok D. Gaikwad, Chairman, Instrumentation and Measurement Society, IEEE Bombay Section, & Head of Instrumentation & Control Deptt.)
- Prof. P. V. S. Shastri, (Principal, CCOEW Pune)
- Prof. (Dr). Madhuri Khambete, (Vice Principal, CCOEW Pune)
- Prof. M. J. Khurjekar, Chairman, IEEE Pune Chapter
- Prof. Dr. D. J. Doke, CCOEW Pune

Faculty:

- Prof. (Dr.) Ajay V. Deshmukh,
- Prof. Atul K. Joshi
- Prof. (Mrs.) Dipali S. Ramdasi
- Prof. (Mrs.) Nivedita M. Daimiwal

Registration form along with the registration fees should reach at the following address on or before 15 Nov. 2008

**The course Co-ordinator
IEEE PIC Microcontroller Workshop**

Cummins College of Engineering for Women, Karvenagar, Pune 411 052

Ph. 020-25311000, 25311250, 25311251,
Venue: Department of Instrumentation and Control, CCOEW Pune

Registration form

Name:Dr/Mrs/Mr/Ms.....
.....

Designation:.....

IEEE Member..... Yes/ No.....
If Yes Membership Number:

Institute/organization:
.....

Address:
.....
.....
.....

E-mail:.....

Phone:.....

Cell:

Fee Details:

DD.No:.....Drawn on

bank:.....

Amount:.....

Date:.....

(DD should be drawn in favor of Principal, Cummins College Of Engineering for Women, Pune)

Date:

Sign