

**Announces Short term Course on  
ADSP APPLICATIONS WITH  
HANDS ON EXPERIENCE**

**It is a golden opportunity for those who  
are seeking change in their profession  
for better prospects**

**Eligibility Criteria:**

Engineers seeking for bright carriers in DSP,  
final year Students and staff members who  
are interested in doing project or research  
work in DSP all are welcome.

**Duration of the course:** 20 hours.

**Day:** Friday, Saturday, Sunday &  
Monday

**Date:** 16,17,18 & 19 Jan 04

**Timing:** Sat., Sun.- 10 am to 5 pm & Fri.,  
Mon.- 5 to 8 pm

**Fees:** Rs.2000/- per participants

\*\* Demand draft / Cheque should be  
drawn in favor of "Coordinator ADSP"

**Venue:**

Dept. of E & TC  
Pune Institute Of Engineering  
&Technology, Pune – 05

**Course coordinator:**

Dr. (Mrs.) M.A.Joshi  
Professor in Electronics

**Course contents:**  
**Theoretical aspect :**

1. Introduction
2. DFT , FFT Algorithm- decimation in time,  
Correlation, finite word length effects.
3. Filter design: FIR design of linear phase, FIR  
filter using Windows & linear phase FIR  
using frequency sampling ,IIR- design of IIR  
filters from analog filters, approximation of  
derivations ,impulse invariance ,bilinear  
transform
4. DSP hardware – Essentials of DSP  
microprocessor, applications & case studies
5. Hardware & Software design –project planning  
& scheduling

**Practical session:**

- ❖ Basic programs on simulator
- ❖ Monitor Architecture & hardware details  
of DSP kits
- ❖ Experiments in bit reversal Do loop ,IRQ,  
timer, ADC & DAC
- ❖ Wave generation using Codec
- ❖ Programs on ADC & DAC
- ❖ DFDP package explanation
- ❖ Demo on LPF & HPF with filter  
parameters
- ❖ Implementation of filters using DIT-FFT
- ❖ Modules in C & DSP
- ❖ Goertzel Algorithm, applications &  
implementation
- ❖ DTMF brief
- ❖ Audio applications :music &speech

**REGISTRATION FORM**

To,  
The Coordinator,  
Short term course on ADSP & its applications  
with hands on experience,  
Dept. of E & TC  
PIET, Pune – 05

**Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_  
\_\_\_\_\_

**Phone no:** \_\_\_\_\_

**Email:** \_\_\_\_\_

**Qualification & Occupancy:** \_\_\_\_\_  
**College / Institute / organization:**  
\_\_\_\_\_

**Other details &any background regarding  
course:** \_\_\_\_\_

**Fees paid by: Rs. 2000/-**  
By Cash/Cheque /Draft: \_\_\_\_\_  
Cheque/Draft No: \_\_\_\_\_  
Date: \_\_\_\_\_  
Bank & branch details: \_\_\_\_\_  
Applicants sign: \_\_\_\_\_

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favor of "Coordinator ADSP".

**Short term Course on  
Advanced digital signal  
processing (ADSP) applications  
with hands on experience**

**Organized by:**

**Dept. of E & TC  
Pune Institute of Engineering &  
Technology,**

**Pune – 05  
(Formerly Govt. college of Engg. )**

**Co-sponsored by:**

**IEEE WIE Affinity Group,  
Mumbai sec.**

**The Institution of Electrical  
Engineers,  
Mumbai Branch**

**On  
16<sup>th</sup>, 17<sup>th</sup>, 18<sup>th</sup> & 19<sup>th</sup> Jan 04**

**Jointly with:  
IEEE Bombay Section &  
IEEE Pune Sub-Section**

**Please return the form to**

**Dr.(Mrs.) M.A.Joshi  
Dept of E & TC  
Pune Institute of Engineering & Technology  
Pune - 05**

**Tel : 25512335 / 36, 25511471  
Email : mej@extc.ioep.org.in**