

# Application Form

(Tick the appropriate Boxes)  
(FILL IN CAPITAL LETTERS)

Name:				
Male <input type="checkbox"/>		Female <input type="checkbox"/>		
Category:				
Student <input type="checkbox"/>	Faculty <input type="checkbox"/>	Industry <input type="checkbox"/>		
College / Organization's Name:				
Address for Correspondence:				
Phone/Mobile:				
Email:				
Draft No:		Branch name:		
Amount:		Date:		
<b>Educational Qualification</b>				
Highest Degree:				
College Name:				
Subject / Specialization:				
Grade / Division:				
Accommodation Required	NO <input type="checkbox"/>	YES <input type="checkbox"/>	Hostel <input type="checkbox"/>	Visitor Hostel <input type="checkbox"/>
Forwarding remark of the Head of the Department / Institute				
Signature (with seal)				

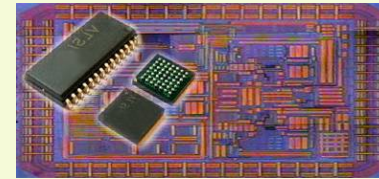
**Mailing Address:**

Coordinator, VLSI Design & Related CAD Tools  
Dept. of ECE  
National Institute of Technology  
Rourkela-769 008, INDIA.  
Phone: 0661-2462454 (O), Fax: 0661-2462963  
Email: vlsi.nitrkl@gmail.com

**Note**

Please mention on the envelope  
"APPLICATION FOR TRAINING PROGRAM ON VLSI  
Design & Related CAD Tools"

## A Short Term Course on VLSI Design & Related CAD Tools



**Coordinator**  
K.K.Mahapatra

**Co-coordinators**  
D. P. Acharya  
B.D.Sahoo

6th June –25th June 2009



Dept. of Electronics and Communication  
Engineering  
National Institute of Technology  
Rourkela-769 008.

## Course Objective

Very Large Scale integrated Circuits (VLSI) have become the prime medium of realization of modern Electronic Systems. There has been a great thrust to train professionals in the VLSI Design to meet the requirements of semiconductor industry. CMOS concepts have become the key of VLSI & ULSI for high-performance computing and other engineering applications.

The main objective of this course is to train students & Professionals with VLSI Design fundamentals and provide them with hands on experience on the software and CAD tools used for VLSI design.

### **Module-I (Duration: 6th June - 15th June, 2009)** **Low Level VLSI Design**

VLSI Design Overview  
Back-End Design  
CMOS fabrication process  
CMOS logic gates  
Sub-system design  
Analog VLSI Design  
CMOS layout design

### **Module-II (Duration: 16th June - 25th June 2009)** **High Level VLSI Design**

ASIC/ FPGA Design  
High level design flow and HDL (VHDL/ Verilog)  
Synthesis  
Placement & Routing, Floor-planning, Testing

#### **VLSI CAD Tools to be used:**

Tanner tools, Xilinx ISE, Mentor Graphics, Synopsys, and CADENCE

Knowledge of Basic and Digital Electronics is a pre-requisite.

## Information

### **Intended Audience**

The course is designed primarily to train students, professionals, scholars, faculties to take up VLSI Design as a career option in industry and academics. Students and Faculties of Electronics, Electrical and Computer Science & Engineering would find this course extremely useful.

### **FEES:**

	Student	Faculty	Industry
Module-I	4000/-	5000/-	7500/-
Module-II	4000/-	5000/-	7500/-
Both	6000/-	8000/-	13000/-

### **Mode of Payment:**

Payment should be done in DD in favor of "**Continuing Education, NIT Rourkela**" payable at **SBI, NIT Campus Branch**. (Code: 2109).

### **Accommodation:**

Accommodation will be provided in Students' hostel or Visitors' hostel of NIT, Rourkela as per availability. For hostel & Visitor Hostel room rent will be charged as per actual.

### **Important Dates:**

Last date of receipt: **28/05/2009**  
(Completed application form with Draft)  
Selection letters to be mailed: **29/05/2009**  
Course commences on **06/06/2009**

### **For further details please contact:**

K.K.Mahapatra: 0661-2462454(O)  
D. P. Acharya : 0661-2462463(O)  
B.D.Sahoo : 0661-2462358(O)  
VLSI Lab : 0661-2464458  
ESD Lab : 0661-2464459

### **Website**

: [http://www.nitrkl.ac.in/shorttermcourse/ei/vlsi\\_design\\_related\\_cad\\_tools.html](http://www.nitrkl.ac.in/shorttermcourse/ei/vlsi_design_related_cad_tools.html)