## Five-day E- Short Term Course On

## AI-Driven VLSI Design and Signal Processing May 27-31, 2024 Registration form

(Last date of registration: May 20, 2024) Name:..... Designation:.....

Organization:

.....

Gender: M..... F.....

Address of communication:

.....

.....

Email:....

Mobile:....

Qualification:....

Payment Mode: SBI Collect

(To pay through SBI collect, select Payment Category

"Workshop/STC/FDP/Conference")

SBI Collect Receipt No .....

Date ..... Amount .....

Link for e-registration through Google Form: -

https://forms.gle/wLPWv7E1NoC2QAV56

Date:

Place:

Signature of candidate Signature & name of Supervisor/HoD/Principal/Director along with Institute Seal

# Patron

Prof. H. M. Suryawanshi

Director, NIT Hamirpur

**Chairman** Dr. Ashwani Kumar Rana

Head, Department of Electronics and Communication Engineering

> **Convener** Dr. Ashwani Kumar Rana

Associate Professor, DoECE

**Course Coordinator** Dr. Sandeep Kumar Singh

Er. Vinod Kumar

**Treasurer** Dr. Sandeep Kumar Singh

Organizing Committee All faculty members and staff of Electronics and Communication Engineering Department

Address for Correspondence Dr. Sandeep Kumar Singh

Assistant Professor, ECE, NIT Hamirpur,

E-mail:

sksingh@nith.ac.in Mobile No.: +91-8800988592 Five-day E- Short Term Course On AI-Driven VLSI Design and Signal Processing

## May 27-31, 2024

An Initiative of National Institute of Technology Hamirpur, Himachal Pradesh, India







**Organized by** Department of Electronics and Communication Engineering National Institute of Technology Hamirpur

Hamirpur, Himachal Pradesh

Pin Code- 177 005, India

Website: www.nith.ac.in

### Background

The proposed short term course emerges from the imperative to address the evolving landscape of technology integration in modern engineering. VLSI (Very Large Scale Integration), Communication, Signal Processing and Artificial Intelligence (AI) represent pivotal domains that, when harmoniously fused, usher in a new era of intelligent systems.

The program envisions creating a cohort of engineers adept at navigating the complexities of integrated smart systems. The benefits extend beyond individual skill development to shaping professionals who can contribute meaningfully to the ongoing technological revolution. As we stand at the intersection of VLSI, Communication, Signal Processing and AI, this program is a strategic initiative to prepare academician and industry persons for the challenges and opportunities of the future.

## **Objective**

The objective of this course is to impart necessary and practical knowledge VLSI, Communication, Signal Processing and Artificial Intelligence, and to develop skills required to build real-life projects.

### **Speakers**

Faculty members of IITs, NITs, IIITs and other premier Institutions/Organizations of India.

## **Course Contents**

- VLSI
- Artificial Intelligence
- Machine Learning and Deep Learning
- Intelligent Computing
- Low Power VLSI Design
- MEMS Design
- System-on-Chip (SoC) design
- Convolutional Neural Network

- AI in VLSI Design
- AI in Signal Processing
- Advanced Communication System
- MIMO-OFDM Systems
- Communication technologies for IoT
- Application of AI & ML in communication

### **Target Audience**

FacultymembersofEngineeringInstitutions/Universities,Researchscholars andPG scholarspursuing research onthe Advanceelectronicsandcommunicationareas,Participantsfrom Industry/R&D organization.

## **Number of Participants**

Number of participants is limited to 50 seats. Application will be accepted on first-cum-first serve basis.

## **E-Certification**

E-certificates will be provided to the participants, with at least 75% attendance, upon successful completion of the program.

### **Important Dates**

Application in the prescribed format should reach the course coordinator by email on or before May 20, 2024.

### **Registration Fee Details**

Participants	Amount (in Rs.)
Participants from	500/-
Academia/R&D Labs	
Students	200/-
Participants from	1000/-
Industries	

### **Bank Details for NEFT:**

Bank & Branch Name: SBI, NIT Hamirpur (H.P.) Account Name: Director NIT Hamirpur Current Account No.: 11159548375 IFSC Code: SBIN0010367

#### **Procedure of SBI collect:**

1. Go to www.onlinesbi.com and select option State Bank Collect

2. Accept terms & conditions and proceed further 3. Select State of Corporate/Institute: Himachal Pradesh and Type of Corporate/Institute: Educational Institute

4. Select Educational Institute Name: NIT

Hamirpur and click on Submit

5. Select Payment category Workshop STC FDP Conference and fill the details to proceed further

### **About the Institute**

NIT, Hamirpur is an institute of National Importance. The Institute offers B. Tech, M. Tech and PhD programmes in various disciplines of Engineering, Humanities and Sciences. The Institute is functioning in a vast area of above 250 acres at Anu in Hamirpur district of Himachal Pradesh and is 4 Kms from main bus stand of Hamirpur on Mandi-Jalandhar National Highway (NH-70). The city of Hamirpur is well connected with the rest of the country by road. Nearest Railway Station: UNA (about 85 Km) and Nearest Airport: GAGGAL (Kangra) (about 85 Km)

### **About Department**

Established in the year 1988, the Electronics & Communication Engineering (E&CE) Department NIT Hamirpur HP, has built an international reputation for excellence in teaching, research, and service. E&CED is making exhilarating progress in areas ranging from microelectronics, mobile communications to VLSI Design Automation. In labs and classrooms, students draw on the expertise and knowledge of our able faculty, integrating practical, hands-on research experience with challenging and interesting coursework. The team approach is very warm in the Department. A palpable excitement surrounds the Department, an enthusiasm pervades every classroom and lab, invigorating our students and spurring on our faculty to fresh innovations.