



PDPM IIITDM Jabalpur

E&ICT Academy, PDPM IIITDM Jabalpur

Online Winter Faculty Development Programme

VLSI Design using Open source tools

February 10 - 21, 2025 : Online live streaming

Jointly Organized by

IIT Guwahati



IIITDM Jabalpur



IIT Roorkee



NIT Patna



MNIT Jaipur



Schedule and Course Contents

[February 10 - 21, 2025, 02:00 PM to 06:00 PM]

- Introduction to VLSI design flow.
- Introduction to High Level Synthesis, Intel HLS Compiler and System Integration, HLS Implementation, Software design with the new HLS Component system
- Introduction to Intel SoC FPGAs, Basic SoC lab demo with hands on
- High level synthesis- scheduling, binding
- Logic synthesis- two level, multilevel logic optimization, encoding
- Sequential circuit optimization, FSM synthesis, retiming, state encoding
- Library binding
- Physical design- partiioning, placement, floor planning, global & channel routing
- Layer and Power Planning
- Delay Calculations and System Implications
- Setup and Hold Discussion Placement Basics and Settings
- DRC LVS and Extraction
- Low Power Flow Basics
- Sign Off

Coordinators

Dr Pushpa Raikwal,
 Joint- Principal Coordinator, IIITDM Jabalpur
 Email: praikwal@iiitdmj.ac.in,
 Mobile: 91-7566961114
 Prof. Gaurav Trivedi,
 Principal Coordinator, IIT Guwahati
 Email: trivedi@iitg.ac.in,

RESOURCE PERSONS

- Dr. Sarfraz Hussain, SoECE, REVA University, Bangalore
- Dr. Amol Boke, Nine Labs, IIT Guwahati
- Dr. Bikram Paul, SCEE, IIT Mandi
- Dr. Rahul Shrestha, IIT Mandi
- Dr. Shaik Rafi Ahamed, IIT Guwahati

Registration Details

Registration link – Please fill in the registration form using the following link:

<https://forms.gle/uTxD6ZTr56QEMsXz8>

Registration fee: INR 500/-

Last Date for Registration: February 03, 2025

Online payment details:

- **Internet banking**

Beneficiary Name: PDPM IIITDM Jabalpur

Bank Name: INDIAN BANK

A/C No. : 50018692852

IFSC Code: IDIB000M694

- **UPI ID: iiitdmj@indianbk**

PDPM IIITDM JABALPUR
SCAN & PAY



UPI ID : iiitdmj@indianbk

Contact Details

- Email: academy@iiitdmj.ac.in, eict@iiitdmj.ac.in
- Mr. Durgesh Kushwaha (+91 7898670354)



Digital India
Power To Empower