



Electronics & ICT Academy IIT Roorkee



An Initiative of
**Ministry of Electronics
& Information
Technology (MeitY)**
Government of India

A Joint Faculty Development Program

on

Semiconductor Fabrication & Packaging Technology

Jan 20 – Jan 31, 2025

(04:00 PM to 08:00 PM)

Register Before: Jan 15, 2025

Experts from IIT Faculty

Online Mode

Platform: Cisco Webex



Why this course ?

The India Semiconductor Mission (ISM) is dedicated to making India a leader in the semiconductor industry, and expertise in this area will be crucial in shaping India's semiconductor landscape for economic growth and technological advancement. This course aims to provide a fundamental understanding of current technologies and advanced concepts in semiconductors along with exposure to hands-on fabrication. It equips individuals with essential knowledge & skills to contribute to India's goal of becoming a global hub for semiconductor design and manufacturing

Prerequisites

Participants can be Faculty, working professionals, Research Scholars, or Students (passed or appearing UG/PG) of Electronics domain

Objectives of the course

The broad objectives of the course are:

- To provide basic concepts of Integrated Circuit(IC) fabrication.
- To introduce advanced state-of-the-art logic, memory, and packaging technologies
- To introduce semiconductor manufacturing and yield engineering
- To provide hands-on user training on semiconductor fabrication and characterization tools

Focus Areas

VLSI & Semiconductor Technology

- Semiconductor Processing Fundamentals
- Unit Process & Process Integration.
- Advanced Semiconductor Logic, Memory, and Packaging Technologies.

Semiconductor Equipment and Wafer Fab Manufacturing

- Equipment Hardware & System Technologies
- Wafer Fab

Fab Equipment Hands-on Training

- **A basic demo** of - Lithography, Deposition, Etching, and Cleaning

Course Features

- 40 Hours of Lectures, hands-on, and Pedagogy/Industry sessions.
- Lectures from Expert Speakers, Hands-on from industry/Academia experts.
- Access to learning material and video lectures
- Certificate by E&ICT Academy IIT Roorkee



Who Should Register?

Any Interested Faculty/PhD-Scholars
UG/PG/ & Industry Persons can register

Registration Fee

Fees: ₹ 500/- Faculty/Research Scholar
Note: Refund will be done in case of course
cancellation only, with in 20 working days

- FDP Kits & Refreshment will be provided

How to make Payment

Please make the payment first using the below link
upload the payment receipt when filling out the
Google registration form

<https://eict.iitr.ac.in/instruction-for-payment/>

Conference Code: EICTIITR-FDP-H24-01

Registration Link

<https://forms.gle/AF54PeonZ2md2FZW8>



Scan QR for
registration

Register before:
Jan 15, 2025

Follow us on:



Course Instructors/Guests

- Dr. Navab Singh, Institute of Microelectronics, Singapore
- Prof. Sanjeev Manhas, IIT Roorkee
- Prof. Arnab Datta, IIT Roorkee
- Prof. Tanmoy Pramanik, IIT Roorkee
- Prof. Brijesh Kumar, IIT Roorkee
- Prof. Pradeep Dixit, IIT Bombay



These certificates can be considered in alignment with other Quality Improvement Programs (QIP) as well as NBA and NAAC for recognition/credit.

Principal coordinator

Prof. Sanjeev Manhas
ECE Department, IIT Roorkee

Joint Principal Coordinators

- Prof. Arnab Datta, IIT Roorkee
- Prof. Gaurav Trivedi, IIT Guwahati
- Dr. Dip Prakash Samajdar, IIITDM Jabalpur
- Dr. Jitendra Bahadur Maurya, NIT Patna
- Dr. Deepak Bharti, MNNIT Jaipur

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