



RFCMOS Integrated Circuits for Transceivers and VLSI Systems

02-04 February, 2024

OVERVIEW

The Department of ECE has planned for 3 Days workshop titled “RFCMOS Integrated Circuits for Transceivers and VLSI Systems”. The workshop will cover the design of low noise amplifier (LNA), mixer, voltage controlled oscillator (VCO), Filter, ADC etc. The functionality of RF integrated system like Receiver and Transmitter will be demonstrated. The simulations of circuits and systems with Commercial Technology Design Kits and RF MOSFET models will be shown at VLSI Design laboratory.

REGISTRATION DETAILS

Participants	Registration fee
For Students	1416
For Professional	2360

1. The registration link is <http://apply.iiita.ac.in/event/register>
2. The last date of registration: 10-01-2024
3. The participants can **pay registration fees through Internet transfer**, the details are:

Account Name: Indian Institute of Information Technology
Account Number: 30996838478
IFSC Code: SBIN0010891, **Bank & Branch:** SBI, Jhalwa, Allahabad

CONTACT

The applicants may contact:

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SCHEDULE

Time	Day 1 Schedule
9:30 -10:00	Inauguration
10:00-11:00	Introduction to VLSI Design
11:00 -11:15	Tea Break
11:15 -12:15	Fundamentals of RF Integrated Circuits
12:15 -13:15	RFCMOS and BiCMOS Technology
13:15 -15:00	Lunch Break
15:00 -16:30	Basic Amplifiers, Low Noise Amplifier (LNA)
16:30 -17:30	Demonstration of circuits at VLSI lab

Time	Day 2 Schedule
10:00-11:00	Oscillators, VCO, PLL
11:00 -11:15	Tea Break
11:15 -12:15	CMOS Mixer, Gilbert cell
12:15 -13:15	Power Management Circuits
13:15 -15:00	Lunch Break
15:00 -16:30	Impact of short channel effects and process variations of MOSFETS for circuit performance
16:30 -17:30	Demonstration of LNA, mixer using Cadence tool

Time	Day 3 Schedule
10:00 -13:15	Data Converters, CMOS filter, Receiver
13:15 – 15:00	Lunch
15:00 - 17:00	CMOS Receiver simulation using Cadence tool
17:00-17:30	Valedictory session