



**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

- The registration link is <http://apply.iiita.ac.in/event/register>
- The last date of registration: 20-01-2024
- 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**

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**SCHEDULE**

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

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

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