

Five Days TEQIP workshop on Analog IC Design using Free Software Tools

2 Oct 2020 to 6 Oct 2020 (5 days)

Schedule							
	9:00 am - 10:30 am	10:30 am - 10:45 am	10:45 am - 12:15 pm	12:15 pm - 2 pm	2:00 pm - 3:30 pm	3:30 pm - 3:45 pm	3:45 pm - 5:15 pm
Day 1	Lecture1	Break	Lecture2	Lunch	Hands-on	Break	Hands-on
Day 2	Lecture3	Break	Lecture4	Lunch	Hands-on	Break	Hands-on
Day 3	Lecture5	Break	Lecture6	Lunch	Hands-on	Break	Hands-on
Day 4	Lecture7	Break	Lecture8	Lunch	Hands-on	Break	Hands-on
Day 5	Lecture9	Break	Lecture10	Lunch	Hands-on	Break	Hands-on

Course contents:

1. Circuit elements in a CMOS process- Components available in CMOS process; resistors, transistors, capacitors and their layouts.
2. Basic amplifier design- Various amplifier topologies CS, CG, CD; signal coupling and biasing.
3. Mismatch and noise- Mismatch in a CMOS process; noise in electrical circuits.
4. Operational amplifier design and layout- Single stage and two stage opamp design; layout of an opamp.

Software tools to be used- LTspice simulator, Magic VLSI layout editor