

Mixed-Signal IC Design

ON-LINE CLASS on Microsoft TEAMS
August 26 - September 6, 2024

WEEK 1		AUGUST 26-30		
WEEK 2		SEPTEMBER 2-6		
DAILY	Central European Time		Eastern Standard Time	Pacific Standard Time
	CET (Lausanne)		EST (New York)	PST (California)
				India Standard Time
				IST (India)
Module 1		3:00-4:30 pm	9:00-10:30 am	6:00-7:30 am
Module 2		5:00-6:30 pm	11:00 -12:30 pm	8:00-9:30 am
				7:30-9:00 pm
				9:30-11:00pm
WEEK 1	Module			
DAY 1, Monday, August 26	1	The Analog-Digital Trade-off - The Impact of Technology Scaling		Jan Rabaey
	2	ULP Mixed-Signal Design for IoT and Wearable Devices: Sensing and Data Acquisition		Jan Rabaey
DAY 2, Tuesday, August 27	1	ULP Mixed-Signal Design for IoT and Wearable Devices: Communication and Computation		Jan Rabaey
	2	ULP Mixed-Signal Design for IoT and Wearable Devices: Energy Harvesting, Storage and Conversion		Jan Rabaey
DAY 3, Wednesday, August 28	1	Evolution in Digital CMOS Technology and its Impact on Design		Jan Rabaey
	2	Design Methodolgy for Systems-on-a-Chip		Jan Rabaey
DAY 4, Thursday, August 29	1 & 2	Noise Coupling in Mixed-Mode ICs: Mechanisms, Simulation, Measurement		Tim Schmerbeck
DAY 5, Friday, August 30	1 & 2	Time Varying Circuits in Mixed-Signal Design		Shanthi Pavan
WEEK 2	Module			
DAY 6, Monday, September 2	1	Offset and CMRR: Random and Systematic		Michiel Steyaert
	2	Fully-Differential Amplifiers		Michiel Steyaert
DAY 7, Tuesday, September 3	1	Interference Effects and PSRR		Michiel Steyaert
	2	Circuit Design for EMC		Michiel Steyaert
DAY 8, Wednesday, September 4	1	Noise Coupling in Mixed-Mode ICs: Design Strategy/Hardware Example		Tim Schmerbeck
	2	Design for (ESD) Robustness in Silicon ICs		Tim Schmerbeck
DAY 9, Thursday, September 5	1 & 2	Modeling and Simulation, Design Methodology		Pavan Hanumolu
Day 10, Friday, September 6	1	Practical Techniques of Frequency Compensation		Vadim Ivanov
	2	Power Management in Efficient Mixed-Signal Integrated Systems		Vadim Ivanov