



PRACTICAL DESIGN OF DATA CONVERTERS

ON-LINE CLASS on MS TEAMS

February 27 - March 10, 2023

WEEK 1		FEB 27 - MARCH 3		
WEEK 2		MARCH 6-10		
DAILY	Central European Time	Eastern Standard Time	Pacific Standard Time	India Standard Time
	CET (Lausanne)	EST (New York)	PST (California)	IST (India)
Module 1	3:00-4:30 pm	9:00-10:30 am	6:00-7:30 am	6:30-8:00 pm
Module 2	5:00-6:30 pm	11:00-12:30 am	8:00-9:30 am	8:30-10:00pm
Module 3 (Tutorial, March 7)	6:45-7:30 pm	12:45-01:30 pm	09:45-10:30 am	10:45-11:30 pm
WEEK 1	Module			
Monday, February 27	1	Basic ADC Topologies: Overview		Marcel Pelgrom
	2	Specifications Overview: INL, DNL, THD, SFDR, SNR, DR, ENOB, Jitter		Marcel Pelgrom
Tuesday, February 28	1	Simulating ADCs: Frequency Domain: FFT, Bin Choice, Windowing, Noise Level, kT/C Noise		Shanthi Pavan
	2	Oversampling ADCs : Discrete-and-Continuous-time Delta-Sigma Converters		Shanthi Pavan
Wednesday, March 1	1	Limits of Nyquist ADC Architectures		Filip Tavernier
	2	ADC Comparators		Marcel Pelgrom
Thursday, March 2	1	ADC Comparators and Reference		Marcel Pelgrom
	2	SAR Versus Pipeline		Marcel Pelgrom
Friday, March 3	1&2	Time Interleaved ADCs		Marcel Pelgrom
WEEK 2	Module			
Monday, March 6	1&2	Mismatch-Shaping Multi-bit DACs		Ian Galton
Tuesday, March 7	1	Case Study of a High-Speed Single-Channel SAR ADC		Filip Tavernier
	2	Case Study of a Time-Interleaved Hybrid ADC		Filip Tavernier
	3	Incremental Data Converters		Gabor Temes
Wednesday, March 8	1	Case Study: Low-Power Data Converters (1)		Kofi Makinwa
	2	Case Study: Low-Power Data Converters (2)		Kofi Makinwa
Thursday, March 9	1	Simulating Sigma-Delta Converters: Part 1		Shanthi Pavan
	2	Simulating Sigma-Delta Converters: Part 2		Shanthi Pavan
Friday, March 10	1	Case Study: Low-Speed Delta Sigma Converter		Shanthi Pavan
	2	Case Study: High-Speed Delta Sigma Converter		Shanthi Pavan