



# DELTA-SIGMA DATA CONVERTERS

**ON-LINE CLASS** by Prof. SHANTHI PAVAN

<b>WEEK 1</b>	<b>JUNE 29 - JULY 2, 2020</b>	8 Modules (1:30hr each), 2 Modules per day
<b>WEEK 2</b>	<b>JULY 6-9, 2020</b>	8 Modules (1:30hr each), 2 Modules per day

	Central European Time	Eastern Standard Time	Pacific Standard Time	India Standard Time
DAILY	<b>CET</b>	<b>EST</b>	<b>PST</b>	<b>IST</b>
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 am -12:30 pm	8:00-9:30 am	8:30-10:00 pm

<b>WEEK 1</b>	
Monday, June 29	Delta Sigma Converter Basics – Parts A & B (Modules 1 + 2)
Tuesday, June 30	Delta Sigma Converter Basics – Parts C & D (Modules 1 + 2)
Wednesday, July 1	Delta Sigma Converter Basics – Part E (Module 1) High-Level Design of Continuous-Time Delta-Sigma Modulators (Module 2)
Thursday, July 2	Non-Idealities in Continuous-Time Delta-Sigma Modulators (Module 1) Design of Building Blocks for CTDSM Modulators - part 1 (Module 2)

<b>WEEK 2</b>	
Monday, July 6	Design of Building Blocks for Continuous-Time Delta-Sigma Modulators - part 2 (Module 1) Systematic Design Centering of a Practical Continuous-Time Delta-Sigma Modulator (Module 2)
Tuesday, July 7	Circuit Techniques to Mitigate Flicker Noise in Continuous-Time Delta-Sigma Modulators (Module 1) FIR Feedback in Continuous-Time Delta-Sigma Modulators (Module 2)
Wednesday, July 8	Introduction to Dynamic Element Matching and Calibration (Module 1) Cascaded Continuous-Time Delta-Sigma Converters (Module 2)
Thursday, July 9	Case Studies: Part 1 (Module 1) Case Studies: Part 2 (Module 2)