

Classification of signals and systems, time-domain representations of continuous time signals, time-domain analysis of continuous LTI systems, frequency-domain representations of continuous time signals, frequency-domain analysis of continuous LTI systems, time-domain representation of discrete time signals, time-domain analysis of discrete LTI systems, analog to digital conversion, sampling theorem, reconstruction of continuous time signals, z-transform, Fourier analysis, Discrete Fourier Transform (DFT), Fast Fourier Transform (FFT), digital filter terminology and design, design of Finite Impulse Response (FIR) and Infinite Impulse Response (IIR) filters, continuous and discrete filters.