

EECE 495: Signal Processing

Sampling as a modulation process, aliasing, the sampling theorem, the Z-transform and discrete-time system analysis, direct and computer-aided design of recursive and non-recursive digital filters, the Discrete Fourier Transform (DFT) and Fast Fourier Transform (FFT), digital filtering using the FFT, analog-to-digital and digital-to-analog conversion, effects of quantization and finite-word-length arithmetic, and design and implementation of these algorithms on Motorola family of Digital Signal Processor chips and/or other similar DSP chips.

Credits: 3

Prerequisites/Permissions:

EECE 333

Program:

Electrical Engineering

COURSE DESCRIPTIONS