BMEN 6385 - Biomedical Signals and Systems

Biomedical Signals and Systems (3 semester credit hours) Time and Frequency domain analysis; continuous-time and discrete-time signals, linear-time invariant (LTI) systems and their properties. Frequency analysis of: LTI systems, continuous-time signals (Fourier series and Fourier transform) and discrete time signals [discrete Fourier series and discrete-time Fourier transform (DTFT)]. Sampling and signal reconstruction. Discrete Fourier transform (DFT) and fast Fourier transform (FFT). Filter design. MATLAB-based tutorials. Prerequisites: ENGR 2300 and EE 4310. (3-0) R