ECE 3204: Digital Signal Processing Laboratory

Experiment 3: Explore the fundamental characteristics of FIR filters and analyze the frequency responses of noisy and enhanced samples by designing user-defined functions (Open Ended Project)

PROJECT PROPOSAL

Group No: B3 Date: 18/9/23

Roll No: 1909043,1909044,1909045,1909046,1909047,1909048

Please provide the following specifications for your proposed FIR filter:

Filter type	Band Pass Filter
Passband (Hz)	1500-2750Hz
Stopband (Hz)	Lower stopband 0-1KHz Upper Stopband 3.5-4.5KHz
Sampling rate (Hz)	8KHz
Passband Ripple (dB)	0.5dB
Stopband Ripple (dB)	40dB
Input Signal	$x(t)= \sin(0.06\pi t) + 3\sin(0.14\pi t)$ + noise signal