



III Year-II Semester	L	T	P	C
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DIGITAL SIGNAL PROCESSING LAB (RT32048)

Prerequisite Course:

Need basic idea of Signals and Systems subject

Course Outcomes:

Upon completion of the course, the student will be able to achieve the following outcomes.

COs	Course Outcomes	POs
1	Understand the handling of discrete/digital signals using MATLAB	3
2	Understand the basic operations of Signal processing	3
3	Analyse the spectral parameter of window functions	3
4	Design IIR, and FIR filters for low pass and high pass filters	3

Syllabus

LIST OF EXPERIMENTS:

1. To study the architecture of DSP chips – TMS 320C 5X/6X Instructions.
2. To verify linear convolution.
3. To verify the circular convolution.
4. To design FIR filter (LP/HP) using windowing technique
 - a) Using rectangular window
 - b) Using triangular window
 - c) Using Kaiser window
5. To implement IIR filter (LP/HP) on DSP Processors
6. N-point FFT algorithm.
7. MATLAB program to generate sum of sinusoidal signals.
8. MATLAB program to find frequency response of analog LP/HP filters.
9. To compute power density spectrum of a sequence.
10. To find the FFT of given 1-D signal and plot.

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R-13 Syllabus for ECE, JNTUK