

## DIGITAL SIGNAL PROCESSING LAB

Digital Signal Processing (DSP) laboratory provides to the requirements of undergraduate programs in Electronics and Communication Engineering. The objective of the laboratory is to enable the students simulate and experiment with digital signals & systems and apply the theory they have studied in Signals and Systems & Digital Signal Processing courses. The students learn advanced tools and techniques to apply, synthesize, design, simulate and implement solutions to modern engineering problems. Experimental activities cover fundamental concepts of digital signal processing such as sampling, aliasing, quantization, filter design and implementation. This lab is to impart knowledge on various DSP processors like TMS320C5X series. The students understand various concepts in signal processing through simulation using MATLAB and implementation using processor kits. The laboratory provides hands-on experience in a way that integrates theory, software, hardware and applications.

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**DSP Laboratory is equipped with the following equipment.**

S.No	Name of the Equipment	Available Number
1	Fixed Point DSP Kit (TMS 320 C50)	2
2	Floating Point DSP (TMS 320 C6 713)	2
3	ARM7 : Specifications (ARM 7 TDM )	8
4	MCU : LPC 2148, 16/32 Bit	2
5	Fixed Point DSP Trainer Kit (TMS 320 C50)	10
6	Floating Point DSP Trainer Kit (TMS 3206713)	6
7	DSP Fixed Floating Point Processor Development Kit (TMS320C6748)	4
8	Color Television	1
9	Testing and Measurement - Digital Storage Oscilloscope	2
10	Computer	30