



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

Electronics and Communication Engineering

Laboratory Equipment – Digital Signal Processing Laboratory

This laboratory provides all hardware and software required is used to design audio signal, speech processing, voice recognition, and analysis of analog and digital signals by using MATLAB software. The configuration of hardware and software used are detailed as follows:

- 1. Server Configuration:** Dell VOSTRO R430, Form Factor: 2U Rack Server, Processor Series: Intel® Xeon® E52623 v3 Product Family, Processor Sockets: 2, Max Memory Capacity: 4GB DDR4, Max Storage Capacity: **160TB HDD**, Supports Intel C610 series chipset, Supported Power Supplies: 495W, 750W, 1100W.
- 2. Operating System:** Microsoft – Microsoft – Windows 11 & amp.
- 3. Connectivity:** 1000Mbps internet and LAN connected to campus server.
- 4. Laboratory Equipment:**

S.No	Item	Make	Quantity	Cost per Unit (Rs.)	Total Cost (Rs.)
1	Digital signal processor trainer kit TMS320C6713 DSK	Texas instruments	10	28,500	2,85,000
2	Digital signal processor trainer kit TMDSDSK6713	Texas instruments	08	23000	1,84,000
3	Function Generator (0-100KHz)	Pacific	10	2,500	25,000
4	Application software: MATLAB software R2015a	Math works, USA	100 users	6,07,070	6,07,070
5	Signal processing tool box	Math works, USA	15 users	6,799.15	1,01,987
6	SL Simulink	Math works, USA	15 users	8,498.30	1,27,474
7	Image processing tool box 9.2	Math works, USA	05 users	9,349.15	46,745
8	Control system tool box	Math works, USA	10 users	6,799.15	67,991
9	PS simpower systems	Math works, USA	15 users	16,996	2,54,940
10	Simscape	Math works, USA	15 users	6,799.15	1,01,987
11	Desktop Computer Systems: Vostro 3920 desktop Intel corei3-4160 processor / 4GB DDR4-500GB SATA HDD / keyboard and mouse / NO ODD / 22” Monitor.	DELL	20	21,502	4,30,040
12	Desktop Computer Systems: Vostro 3268 desktop Intel corei3-4160 processor / 4GB DDR4-500GB SATA HDD / keyboard and mouse / NO ODD / 22” Monitor.	DELL	04	21,600	86,400

13	Digital signal processor trainer kit TMS320C6713 DSK	Texas instruments	10	28,500	2,85,000
Total Cost (Rs.)					23,18,636
In Words- Rupees twenty three lakh eighteen thousand six hundred and thirty six only					

Date:

HOD