



# INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)  
Dundigal, Hyderabad - 500 043

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

### CONTROL SYSTEMS LABORATORY

This laboratory provides all hardware and software required to design and simulation of control systems with the applications using MATLAB software. The configuration of hardware and software used are detailed as follows:

**Server Configuration:** Dell VOSTRO 3268, Intel i3 - 7100 core processor, 4 GB RAM, 500 GB hard disk.

**PLC trainer kits:** DVP 14SS2, DVP 16SP, DVP 06XA

- Operating System:** Microsoft – Microsoft – Windows 10
- Connectivity:** 1000Mbps internet and LAN connected to campus server.
- Laboratory Equipment:**

S No	Item	Make	Quantity	Cost per Unit (Rs.)	Total Cost (Rs.)
1	Programmable logic controller trainer unit VFD007E21A, 24 V DC, I/O ports: 8/6, output type relay and transistor	MKR Industrial automations & services	02	17,500	17,500
2	DC Motor study kit DC motor 8 W, 12V, coupled to DC generator	Future tech instruments Pvt. Ltd.	01	16,425	16,425
3	AC Servomotor 12V DC supply to motor, Load: 500 $\Omega$ /25 W	Future tech instruments Pvt. Ltd.	01	15,066	15,066
4	PID controller trainer kit variable dc voltage source: +/-1 V 3 1/2 digit, digital voltmeter: +/-19.99 V	Future tech instruments Pvt. Ltd.	01	13,392	13,392
5	Temperature control system study kit Operating temperature: ambient to 900° C, 25W oven fitted with IC temperature sensor	Future tech instruments Pvt. Ltd.	01	13,050	13,050
6	Linear system simulator kit Power supply: +12 V, 250 MA, 40 to 100 HZ a) Sine wave: 0 - 2 V P - P b) Triangular wave: 0 - 2 V P - P c) Trigger spikes: +/- 5 V P - P	Future tech instruments Pvt. Ltd.	02	10,332	10,332
7	Desktop computer systems, Intel i3 - 4150 core processor, 4 GB RAM, 500 GB hard disk	Dell Vostro 3902	10	21,154	2,11,540
8	MATLAB 9.0	Math Works, USA	10	6,284	62,840
9	LabVIEW system Design Software	Tec fluent Solutions Pvt. Ltd	10	19,774	1,97,740
<b>Total cost</b>					<b>5,57,885</b>
In words - Rupees five lakhs fifty seven thousand eight hundred and eighty five only					

Date:

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