



**DEENBANDHU CHHOTU RAM UNIVERSITY OF SCIENCE & TECHNOLOGY, MURTHAL,  
SONEPAT, HARYANA-131039**

**Apparatus / Softwares for B. Tech. in Information Technology (4 Years)**

	INFRASTRUCTURE	REQUIRED	AVAILABLE	DEFICIENCY
<b>List of Labs / Equipment</b>				
<b>S.N.</b>	<b>Equipment / Software Required</b>	<b>Quantity</b>		
<b>2<sup>nd</sup> Year labs: Analog Communication Lab, Digital System Design Lab, Advanced C and Data Structures Lab, Internet Fundamentals Lab, Data Base Management Systems Lab, Object Oriented Programming Lab,</b>				
<b>Name of the lab: ECE Analog Communication Lab</b>				
1.	Amplitude Modulation & Demodulation kit	03		
2.	Frequency Modulation & Demodulation kit	03		
3.	Pulse Amplitude Modulation & Demodulation kit	03		
4.	Pulse Width Modulation & Demodulation kit	03		
5.	Pulse Position Modulation & Demodulation kit	03		
6.	Pulse Code Modulation & Demodulation kit	03		
7.	Aptitude Shift Keying kit	03		
8.	Frequency Shift Keying kit	03		
9.	Phase Shift Keying kit	03		
10.	Quadrature Phase Sift keying kit	03		
11.	CRO (30MHz)	05		
12.	Function Generator (3Mhz)	05		
13.	DC Power Supply	05		
14.	Mutimeter	10		
15.	UPS (Depending on equipments load)	01		
<b>Name of the lab: Digital System Design Lab</b>				
16.	Simulation Software for CPLD / FPGA 25 Users	01		
17.	Synthesis Software for CPLD / FPGA	01		
18.	FPGA kit	20		
19.	CPLD kit	05		
20.	Server	01		
21.	Workstations	25		
22.	UPS	01		
23.	Networking	Desirable		
24.	Logic Analyzer	01		
25.	Digital Storage Oscilloscope 50 MHz	02		
26.	UPS (Depending on equipments load)	01		
<b>Name of the lab: Advanced C and Data Structures Lab</b>				
27.	Desktop Computers	25		
28.	Turbo C/GCC Compiler	25 user license		
<b>Name of the lab: Internet Fundamentals Lab</b>				
29.	Desktop Computers	25		
30.	Internet connection with suitable connectivity	On all 25 machines		
<b>Name of the lab: Data Base Management Systems Lab</b>				
31.	Desktop Computers	25		
32.	DBMS Software (MySQL/Oracle/SQL Server )	25 user license		
<b>Name of the lab: Object Oriented Programming Lab</b>				
33.	Desktop Computers	25		
34.	Turbo C++/GCC++ Compiler	25 user license		
<b>3<sup>rd</sup> Year labs: Microprocessor Interfacing Lab, Analysis &amp; Design of Algorithms Lab, Java Programming Lab, Computer Networks Lab, Unix/Linux Programming Lab, Net Technologies Lab, Computer Graphics Lab,</b>				

Certified by the Director/Principal

	INFRASTRUCTURE	REQUIRED	AVAILABLE	DEFICIENCY
<b>Name of the lab: Microprocessor Interfacing Lab</b>				
35.	8085 Microprocessor trainer kit	15		
36.	8086 Microprocessor trainer kit	15		
37.	8085 Microprocessor simulator 20 Users	01		
38.	8086 Microprocessor simulator 20 Users	01		
39.	Module of Traffic light controller	03		
40.	Module of stepper motor	03		
41.	Module of seven segment display	03		
42.	Module of A/D converter	03		
43.	Module of D/A converter	03		
44.	Computer System	10		
45.	CRO (30 MHz )	03		
46.	Digital Multimeter	03		
47.	DC Power Supply	03		
48.	UPS (Depending on equipments load)	01		
<b>Name of the lab: Analysis &amp; Design of Algorithms Lab</b>				
49.	Desktop Computers	25		
50.	Turbo C/GCC Compiler	25 user license		
<b>Name of the lab: Java Programming Lab</b>				
51.	Desktop Computers	25		
52.	Java	25 user license		
<b>Name of the lab: Computer Networks Lab</b>				
53.	Desktop Computers	25		
54.	Java(optional)	25 user license		
	Turbo C/GCC Compiler(Optional)	25 user license		
<b>Name of the lab: Unix/Linux Programming Lab</b>				
55.	Desktop Computers	25		
56.	Linux/Unix	25 users license		
57.	Turbo C/GCC Compiler	25 user license		
58.				
<b>Name of the lab: .Net Technologies Lab</b>				
59.	Desktop Computers	25		
60.	ASP.Net/ JSP.Net	25 user license		
<b>Name of the lab: Computer Graphics Lab</b>				
61.	Desktop Computers	25		
62.	Turbo C/GCC Compiler	25 user license		
<b>4<sup>th</sup> Year labs: Advanced JAVA Programming Lab, Advanced Data Base Management Systems Lab, Compiler Design Lab, Mobile Communication Lab, Object Oriented Software Engineering Lab,</b>				
<b>Name of the lab: Advanced JAVA Programming Lab</b>				
63.	Desktop Computers	25		
64.	Java with Beans, swings, J2ME, J2EE	25 user license		
<b>Name of the lab: Advanced Data Base Management Systems Lab</b>				
65.	Desktop Computers	25		
66.	DBMS Software (MySQL/Oracle/SQL Server )	25 user license		
<b>Name of the lab: Compiler Design Lab</b>				
67.	Desktop Computers	25		
68.	Turbo C/GCC Compiler	25 user license		
<b>Name of the lab: Mobile Communication Lab</b>				
69.	Desktop Computers	25		
70.	Turbo C/GCC Compiler	25 user license		
71.	Network Simulator (either open source like NS2, Glomosim, or any licensed one, later on hardware equipments like sensor nodes may also be added )			
72.	Wi-fi network of the institute may also be utilized for the same			
<b>Name of the lab: Object Oriented Software Engineering Lab</b>				
73.	Desktop Computers	25		
74.	Rational Rose	01 Suite		

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