

I Year B. Tech. (Modified R2004)

PC 1X01 PHYSICS & CHEMISTRY LABORATORY

Requirements for a batch of 30 students

Physics Laboratory

S.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
1.	Torsional Pendulum apparatus (With accessories)	5 No	6 No	
2.	Non-uniform Bending apparatus (With accessories)	5 No	6 No	
3.	Viscosity (Poiseuille's flow) apparatus (With accessories)	5 No	6 No	
4.	Lees' disc apparatus (With accessories)	5 No	6 No	
5.	Air Wedge apparatus (With traveling microscopes and accessories)	5 No	6 No	
6.	Band gap apparatus/ Post office box	5 No	5 No	
7.	Spectrometer (With grating, prism and accessories)	5 No	6 No	
8.	Diode laser (2 mW power) or He-Ne laser (2mW) (Lycopodium powder, Optical fibre Kit and accessories)	5 No	6 No	
9.	Thermo emf – potentiometer apparatus (With accessories)	5 No	6 No	
10.	Ultrasonic interferometer (With accessories)	5 No	5 No	

Chemistry Laboratory

S.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
1.	Electronic balance	1 No.	1 No.	
2.	pH meter	4 No.	4 No.	
3.	Conductivity bridge	4 No.	4 No.	
4.	Potentiometer	4 No.	4 No.	
5.	Platinum electrodes	4 No.	4 No.	
6.	Calomel electrodes	4 No.	4 No.	
7.	Spectrophotometer	1 No.	1 No.	
8.	Flame photometer	1 No.	1 No.	
9.	Oswald viscometer	10 No.	31 No.	
10.	Glassware	Sufficient Quantity	Available	

I Year B. Tech. (Modified R2004)

GE 1X02 COMPUTER PROGRAMMING LABORATORY

Requirements for a batch of 30 students

S.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
Hardware				
1.	LAN system with 36 nodes (OR) stand alone PCs	36 No.	63 No.	
2.	Printer	1 No.	3 No.	
Software				
1.	Operating System	Windows / Unix Clone	Available	
2.	Compiler	C compiler	Available	
3.	Application package	Office suite	Available	

I Year B. Tech. (Modified R2004)
GE 1X03 Engineering Practices Laboratory
Requirements for a batch of 30 students

S.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
CIVIL				
1.	Assorted components for plumbing consisting of metallic pipes, plastic pipes, flexible pipes, couplings, unions, elbows, plugs and other fittings.	15 sets	15 sets	
2.	Carpentry vice (fitted to work bench)	15 No.	15 No.	
3.	Standard woodworking tools	15 sets	15 sets	
4.	Models of industrial trusses, door joints, furniture joints	5 each	5 each	
MECHANICAL				
1.	Arc welding transformer with cables and holders	5 No.	5 No.	
2.	Welding booth with exhaust facility	5 No.	5 No.	
3.	Welding accessories like welding shield, chipping hammer, wire brush, etc.	5 sets	5 sets	
4.	Oxygen and acetylene gas cylinders, blow pipe and other welding outfit.	2 No.	2 No.	
5.	Centre lathe	2 No.	2 No.	
6.	Hearth furnace, anvil and smithy tools	2 sets	2 sets	
7.	Moulding table, foundry tools	2 sets	2 sets	
8.	Study-purpose items: centrifugal pump, air-conditioner	One Each.	One Each.	

ELECTRICAL				
1.	Assorted electrical components for house wiring	15 sets	15 sets	
2.	Electrical measuring instruments	10 sets	10 sets	
3.	Study purpose items: Iron box, fan and regulator, emergency lamp	One each	One each	
ELECTRONICS				
1.	Soldering guns	10 No.	10 No.	
2.	Assorted electronic components for making circuits	50 No.	50 No.	
3.	Small PCBs	10 No.	10 No.	
4.	Multi Meters	10 No.	11 No.	
5.	Study purpose items: Telephone, FM radio, low-voltage power supply	2 each	2 each	

I Year B. Tech. (Modified R2004)

B.Tech Information Technology

EC 1X11 ELECTRON DEVICES AND CIRCUITS

Requirement for a batch of 30 students

Sl.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
1.	RPS (0-30V)	13	15	
2.	RPS (0-50V)	1	1	
3.	0 - 50 MA Ammeter	8	8	
4.	0 - 50 μ A Ammeter	2	2	
5.	0 – 1 V Voltmeter	3	20	
6.	0 – 30 V Voltmeter	8	20	
7.	0 – 10 V Voltmeter	1	20	
8.	0 – 50 V Voltmeter	1	20	
9.	5V RPS	1	5	
10.	\pm 15V RPS	1	5	
11.	CRO 30 MHZ	5	8	
12.	Audio Osc.	3	3	
13.	Diode	6	50	
14.	Zener diode	5	25	
15.	Transistor (NPN + PNP)	10	10	
16.	UJT	10	10	
17.	FET	10	10	
18.	SCR	10	10	
19.	555 Timer	10	10	
20.	Passive components	Sufficient Quantity	Available	

Faculty of Information and Communication Engineering

III Semester B. Tech. – Information Technology (Modified R 2004)

CS 1152 – Data structure Lab

Requirement for a batch of 30 students

S.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
1.	Pentium III machines	30	40	
2.	Borland or Turbo C Software	30 Users	40 Users	

Faculty of Information and Communication Engineering

III Semester B. Tech. – Information Technology (Modified R 2004)

CS1205 – Object Oriented Programming Laboratory

Requirement for a batch of 30 students

S.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
1.	Software a) C++ Compiler b) J2SDK (free download)	30 Nos	40 Nos	

Faculty of Information and Communication Engineering
III Semester B. Tech. – Information Technology (Modified R 2004)
CS1206 – Digital Laboratory
Requirement for a batch of 30 students

S.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
	Components			
1	Ics			
	○ 74LS00	Minimum of 30 numbers	40 Nos.	
	○ 74LS04	”	40 Nos.	
	○ 74LS08	”	40 Nos.	
	○ 74LS32	”	40 Nos.	
	○ 74LS86	”	40 Nos.	
	○ 74LS02	”	40 Nos.	
	○ 74LS76	”	40 Nos.	
	○ 74LS280	”	40 Nos.	
	○ 74LS85	”	40 Nos.	
	○ 74LS83	”	40 Nos.	
	○ 74LS11	”	40 Nos.	
	○ 74LS151	”	40 Nos.	
	○ 74LS153	”	40 Nos.	
	○ 74LS138	”	40 Nos.	
	○ 74LS180	”	40 Nos.	
	○ 74LS47	”	40 Nos.	
	○ 74LS93	”	40 Nos.	
	○ 74LS90	”	40 Nos.	
	○ 74LS157	”	40 Nos.	
	○ 74LS73	”	40 Nos.	
	○ 74LS74	”	40 Nos.	
	○ 555	”	40 Nos.	
	○ 74LS48	”	40 Nos.	
	○ 74LS10	”	40 Nos.	
	○ 74LS20	”	40 Nos.	
	○ 7414	”	40 Nos.	
2	Seven Segment Display	30 nos	40 Nos.	
3	Bread Board	30 nos.	30 Nos.	
4	Power Supply	30 nos.	30 Nos.	
5	LEDS	200 nos.	200 Nos.	
6	Wires	As required	Available	
7	Logic Probe	5 nos.	5 nos.	
8	Xilinx Software Navigator Tool	5 nos.	5 nos.	
9	Model Sim 4.6 ver(synthesis)	5 nos.	5 nos.	

Faculty of Information and Communication Engineering

IV Semester B. Tech. – Information Technology (Modified R 2004)

IT1253 – Software Engineering Lab

Requirement for a batch of 30 students

S.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
1.	Software ➤ C++ ➤ Pro C / Equivalent ➤ SQL / Equivalent ➤ MS-Access / Equivalent (DTL has to be installed)	Multiuser Licenses*	40	
2.	Hardware	1 Server + 30 PCs	1 Server + 40 PCs	

*** No of Licenses = No of Computers**

Faculty of Information and Communication Engineering

IV Semester B. Tech. – Information Technology (Modified R 2004)

IT1254 – DSP and Communication Systems Lab

Requirement for a batch of 30 students

S.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
1.	CD4066	10	10	
2.	IC741	20	35	
3.	NE566	10	10	
4.	IC565	20	25	
5.	XR-2206	10	10	
6.	SL100	20	25	
7.	OA79	20	20	
8.	AM/FM Transmitter Kit	2	2	
9.	AM/FM Receiver Kit	2	2	
10.	Capacitor	As required	Available	
11.	Resistors	As required	Available	
12.	MATLAB 5.0	5 Users	10 Users	

Faculty of Information and Communication Engineering
IV Semester B. Tech. – Information Technology (Modified R 2004)
CS1306 – Microprocessors and Microcontrollers Lab
Requirement for a batch of 30 students

S.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
1	HARDWARE ➤ 8085 Microprocessor Kits (Including) ○ 8255 Interface ○ 8253 Interface ○ 8279 Interface ○ 8259 Interface ○ 8251 Interface ➤ 8086 Microprocessor Kits (Including) ○ 8255 Interface ○ 8253 Interface ○ 8279 Interface ○ 8259 Interface ○ 8251 Interface ➤ 8051 Microcontroller Interface Devices like ➤ Floppy Disk Controller ➤ Hard disk Controller ➤ Keyboard Controller ➤ Display Controller Add On boards like ➤ Traffic Light Controller ➤ Stepper Motor Controller ➤ DC Motor Controller ➤ ADC/DAC Board ➤ IC Tester ICs like ➤ 74LS00 ➤ 74LS32 ➤ 74LS04 ➤ 74LS08 ➤ Cathode Ray Oscilloscope ➤ Bread Boards	 30 15 15 Minimum of 2 if Overlapping is done 5 5 5 5 5 Minimum of 40 Nos. 5 5	 30 15 5 5 5 5 5 40 Nos. 8 15	
2	SOFTWARE ➤ TASM (Turbo Assembler) or MASM ➤ Cross assembler	30 Nos.	30 Nos.	
3	PC supporting above software	30 Nos	30 Nos	

Faculty of Information and Communication Engineering

V Semester B. Tech. – Information Technology (Modified R 2004)

CS1254 – Operating System Lab (Linux based)

Requirement for a batch of 30 students

S.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
1	Software ➤ C++ ➤ UNIX / LINUX	30 Nos	40 Nos	
2.	Hardware	1 Server and 30 PCs	1 Server and 40 PCs	

Faculty of Information and Communication Engineering

V Semester B. Tech. – Information Technology (Modified R 2004)

CS1307 – DBMS Lab

Requirement for a batch of 30 students

S.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
1	FRONT END <ul style="list-style-type: none">➤ VISUAL STUDIO (VC++ / VB)➤ D2K or equivalent	30 Users	40 Users	
2	Back End <ul style="list-style-type: none">➤ Any relational database management system like Oracle/DB2/SYBASE/MySQL	1(Server) + 30 Users	Unlimited	
3	Hardware <ul style="list-style-type: none">➤ PCs	30 No	40 Nos.	

Faculty of Information and Communication Engineering

V Semester B. Tech. – Information Technology (Modified R 2004)

CS1403 – Case Tools Lab

Requirement for a batch of 30 students

S.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
1.	CASE TOOL ➤ Rational Suite/ Win Runner/Describe or equivalent	30 Nos	30 Nos	
2.	LANGUAGES ➤ C++ Compiler ➤ JDK ➤ JSDK(Free ware) ➤ UML	30 Nos	30 Nos	
3.	FRONT END ➤ VB/VC++ / D2K or equivalent	30 Nos	40 Nos	
4.	Back End ➤ Oracle/MySQL or equivalent	30 user license	Unlimited	
5.	Hardware	1 Server and 30 PCs	1 Server and 30 PCs	

Faculty of Information and Communication Engineering
V Semester B.Tech. Information Technology (Modified R 2004)

Communication Skills Laboratory

Requirement for a batch of 60 students

S.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
1.	Server	1 No.	1 No.	
	o PIV system			
	o 1 GB RAM / 40 GB HDD			
	o OS: Win 2000 server			
	o Audio card with headphones (with mike)			
o JRE 1.3				
2.	Client Systems	60 No.	60 No.	
	o PIII or above			
	o 256 or 512 MB RAM /40 GB HDD			
	o OS: Win 2000			
	o Audio card with headphones (with mike)			
o JRE 1.3				
3.	Softwares			
	a) Interactive Teacher Control Software	Available		
	b) English Language Lab Software	Available		
	c) Career Lab software	Available		
4.	Handicam Video Camera (with video lights and mic input)	1 No.	1 No.	
5.	Television - 29"	1 No.	1 No.	
6.	Collar mike	1 No.	1 No.	
7.	Cordless mikes	1 No.	1 No.	
8.	Audio Mixer	1 No.	1 No.	
9.	DVD Recorder / Player	1 No.	1 No.	
10.	LCD Projector with MP3 /CD /DVD provision for audio / video facility - Desirable	1 No.	Available	

Faculty of Information and Communication Engineering

VI Semester B.Tech. – Information Technology (Modified R 2004)

CS1255 – Visual Programming Lab

Requirement for a batch of 30 students

S.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
1	SOFTWARE ➤ VISUAL STUDIO (VC++/VB)	30	40	
2	Hardware ➤ PCs	30	40	

Faculty of Information and Communication Engineering

VI Semester B.Tech. – Information Technology (Modified R 2004)

CS1305 – Network Lab

Requirement for a batch of 30 students

S.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
1	SOFTWARE ➤ C++ Compiler ➤ J2SDK (freeware) ➤ Network simulators ➤ NS2/Glomosim/OPNET (Freeware)	30	MSDN Academic Alliance	
2	Hardware ➤ PCs	30 Nos	40 Nos	

Faculty of Information and Communication

VII Semester B. Tech. – Information Technology (R 2004)

IT1403 – Software Components Lab

Requirement for a batch of 30 students

S.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
1	SOFTWARE <ul style="list-style-type: none">➤ Visual Studio (VB/ VC++)➤ Application server (IBM WEB SPHERE / BEAN WEB LOGIC / MICROSOFT IIS / PWS)➤ J2EE (Freeware)➤ VISI BROKER (Freeware)	30 No.	40 Nos.	
2	Hardware	1(Server)+ 30 PCs	1(Server)+ 40 PCs	

Faculty of Information and Communication Engineering

VII Semester B. Tech. – Information Technology (R 2004)

CS1355 – Graphics and Multimedia Lab

Requirement for a batch of 30 students

S.No.	Description of Equipment	Quantity required	Quantity available	Deficiency %
1	Hardware Computer with Multimedia Kit & <ul style="list-style-type: none">➤ Web Camera,➤ Speakers,➤ Microphones,➤ Scanner	30 No.	30 No.	
2	Software <ul style="list-style-type: none">➤ Adobe Photoshop or equivalent➤ Macromedia Director➤ Macromedia Flash➤ Macromedia Dream Weaver➤ J2SDK (free ware)	30 No.	30 No.	