# Faculty of Information and Communication Engineering B.E. Electronics and Communication Engineering (R 2017) Semester – II

#### EC8261 CIRCUITS AND DEVICES LABORATORY

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	BC107,BC148,2N2646,BFW10	25		
2.	IN4007,Zener diodes	25		
3.	Resistors, Capacitors, Inductors-	100		
4.	Bread Boards	15		
5.	CRO(30MHz)	15		
6.	Function Generators(3MHz)	10		
7.	Dual Regulated power Supplies(0-30V)	10		

# Faculty of Information and Communication Engineering B.E. Electronics and Communication Engineering (R 2017) Semester – III

# EC8361 ANALOG AND DIGITAL CIRCUITS LABORATORY Requirements for a batch of 30 students

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	CRO (30MHz)	15		
2.	Signal Generator /Function Generators (3 MHz)	15		
3.	Dual Regulated Power Supplies ( 0 - 30V)	15		
4.	Standalone desktop PCs with SPICE software	15		
5.	Transistor/FET (BJT-NPN-PNP and NMOS/PMOS)	50		
6.	Dual power supply/single mode power supply	15		
7.	Resistors, Capacitors, Inductors	50		
8.	Diodes, Zener diode	10		
9.	IC Trainer Kit	15		
10.	Bread Boards	15		
11.	Computer with HDL software	15		
12.	Seven segment display	15		
13.	Multimeter	15		
14.	ICs 7400/ 7402 / 7404 / 7486 / 7408 / 7432 / 7483 / 74150 / 74151 / 74147 / 7445 / 7476/7491/ 555 / 7494 / 7447 / 74180 / 7485 / 7473 / 74138 / 7411 / 7474	50		

# Faculty of Information and Communication Engineering B.E. Electronics and Communication Engineering (R 2017) Semester – III

# EC8381 FUNDAMENTALS OF DATA STRUCTURES IN C LABORATORY

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
	Standalone desktops (or) Server supporting with C compiler	30		

# Faculty of Information and Communication Engineering B.E. Electronics and Communication Engineering (R 2017) Semester – IV

# EC8461 CIRCUITS DESIGN AND SIMULATION LABORATORY

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	CRO (Min 30MHz)	15		
2.	Signal Generator /Function Generators (2 MHz)	15		
3.	Dual Regulated Power Supplies ( 0 - 30V)	15		
4.	Digital Multimeter	15		
5.	Digital LCR Meter	2		
6.	Standalone desktops PC	15		
7.	Transistor/FET (BJT-NPN-PNP and NMOS/PMOS)	50		
8.	Transistors, Resistors, Capacitors, Inductors, diodes, Zener Diodes, Bread Boards, Transformers	50		
9.	SPICE Circuit Simulation Software (any public domain or commercial software)	15		

# Faculty of Information and Communication Engineering B.E. Electronics and Communication Engineering (R 2017) Semester – IV

### **EC8462 LINEAR INTEGRATED CIRCUITS LABORATORY**

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	CRO /DSO (Min 30MHz)	15		
2.	Signal Generator /Function Generators (2 MHz)	15		
3.	Dual Regulated Power Supplies ( 0 - 30V)	15		
4.	Digital Multimeter	15		
5.	IC tester	5		
6.	Standalone desktops PC	15		
7.	Transistors, Resistors, Capacitors, diodes, Zener diodes, Bread Boards, Transformers, wires, Power transistors, Potentiometer, A/D and D/A convertors, LEDs	50		

# Faculty of Information and Communication Engineering B.E. Electronics and Communication Engineering (R 2017) Semester – V

### **EC8562 DIGITAL SIGNAL PROCESSING LABORATORY**

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	PCs with Fixed / Floating point DSP Processors (Kit / Add-on Cards)	15		
2.	MATLAB with Simulink and Signal Processing Tool Box or Equivalent Software in desktop systems	15		
3.	Signal Generators (1MHz)	20		
4.	CRO (20MHz)	20		

# Faculty of Information and Communication Engineering B.E. Electronics and Communication Engineering (R 2017) Semester – V

# EC8561 COMMUNICATION SYSTEMS LABORATORY

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Kits for Signal Sampling, TDM, AM, FM, PCM, DM and Line Coding Schemes, Error control code	14		
2.	CROs	15		
3.	MATLAB/SCILAB or equivalent software package for simulation experiments	20		
4.	PCs	20		
5.	Probes(CRO)	30		
6.	Patch cords	100		
7.	MSO	4		
8.	DSO	4		

# Faculty of Information and Communication Engineering B.E. Electronics and Communication Engineering (R 2017) Semester – V

# EC8563 COMMUNICATION NETWORKS LABORATORY

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	C / Python / Java / Equivalent Compiler	30		
2.	Standard LAN Trainer Kits	4		
3.	Qualnet /Optisim /Matlab /NS2/ Netsim	30		
4.	PCs	30		

# Faculty of Information and Communication Engineering B.E. Electronics and Communication Engineering (R 2017) Semester – VI

# EC8681 MICROPROCESSOR AND MICROCONTROLLER LABORATORY Requirements for a batch of 30 students

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	8086 Microprocessor trainer kit with power supply	15		
2.	8051 Microcontroller trainer kit	15		
3.	Traffic light control interfacing card compatible with 8086 & 8051 kits	5		
4.	Stepper motor control interfacing compatible with 8086 & 8051kits	5		
5.	Digital clock interfacing board compatible with 8086 & 8051 kits	5		
6.	Keyboard & Display interface board compatible with 8086 & 8051 kits	5		
7.	Printer interfacing card compatible with 8086 & 8051 kits	5		
8.	A/D and D/A interfacing card compatible with 8086 & 8051 kits	5		
9.	Serial and Parallel interfacing card compatible with 8086 & 8051 kits	5		

# Faculty of Information and Communication Engineering

# **B.E. Electronics and Communication Engineering**

### (R 2017) Semester - VI

### **EC8661 VLSI DESIGN LABORATORY**

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Xilinx ISE/Altera Quartus/ equivalent EDA Tools	10		
2.	Xilinx/Altera/equivalent FPGA Boards	10		
3.	Cadence/Synopsis/ Mentor Graphics/Tanner/equivalent EDA Tools	10		
4.	Personal Computer	30		

# Faculty of Information and Communication Engineering

# **B.E. Electronics and Communication Engineering**

### (R 2017) Semester - VII

#### **EC8711 EMBEDDED LABORATORY**

#### Requirements for a batch of 30 students (3 students per batch)

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1	Embedded trainer kits with ARM board	10		
2	Embedded trainer kits suitable for wireless communication	10		
3.	Adequate quantities of Hardware, software and consumables	10		

# **Faculty of Information and Communication Engineering**

# **B.E. Electronics and Communication Engineering**

# (R 2017) Semester - VII

#### **EC8761 ADVANCED COMMUNICATION LABORATORY**

#### Requirements for a batch of 30 students (3 students per batch)

SI. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1	Trainer kit for carrying out LED and PIN diode characteristics, Digital multi meter, optical power meter	2		
2	Trainer kit for determining the mode characteristics, losses in optical fiber	2		
3	Trainer kit for analyzing Analog and Digital link performance, 2 Mbps PRBS Data source, 10 MHz signal generator, 20 MHz Digital storage Oscilloscope	2		
4	Kit for measuring Numerical aperture and Attenuation of fiber	2		
5	Advanced Optical fiber trainer kit for PC to PC communication, BER Measurement, Pulse broadening	2		
6	MM/SM Glass and plastic fiber patch chords with ST/SC/E2000 connectors	2		
7	LEDs with ST / SC / E2000 receptacles – 650 / 850 nm	2		
8	PIN PDs with ST / SC / E2000 receptacles – 650 / 850 nm	2		
9	Digital Communications Teaching Bundle (LabVIEW/MATLAB/Equivalent software tools)	10		
10	Software Define Radio Transceiver Platform with antennas and accessories	2		