



Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058-India
(Autonomous Institute Affiliated to University of Mumbai)

Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned				
		L	T	P	L	T	P	Total	
ETL602	Communication Engineering Laboratory III	--	--	2	--	--	1	1	
		Examination Scheme							Total
		ISE		ESE			Total		
				Practical	Oral				
		40	10		10		60		

Pre-requisite Course Codes	ETC 601: Digital Communication ETC 603: Computer Communication and Networks
After successful completion of the course, student will be able to	
Course Outcomes	CO1 Ability to implement various concepts of networking and digital communication.
	CO2 Ability to design/configure/reconfigure sub blocks and components of networking and digital communication.
	CO3 Ability to write and debug software programs

Exp. No.	Experiment Details	Ref.	Marks
1	Binary Amplitude Shift Keying		5
2	Binary Phase Shift Keying		5
3	Binary Frequency Shift Keying		5
4	Hamming code Encoder		5
5	Syndrome Decoder		5
6	Duo binary Encoder		5
7	QAM PSD and Constellation diagram		5
8	Transmission of Convolutionally coded QPSK signal through AWGN channel		5
9	Signal transmission through Raised cosine filter		5
10	BER analysis of BPSK signal		5
11	Transmission of QAM signal using USRP (Demo)		5
12	Understanding of basic Network utilities on Linux OS: ifconfig, ping, telnet, traceroute, nslookup, netstate, whois, curl.		5
13	Socket Programming using Python, Introduction to Packet Tracer		5
14	Design network topology using Packet tracer and verify the communication among various entities using suitable network utilities		5
15	Designing network topology using DHCP, DNS and HTTP Servers configuration and their verification		5
16	Subnet Design and Router Configuration, RIPv2 Router Configuration and testing through various learning objectives		5
*Any 08 Experiments to be performed.			Total Marks
			40

References: As per recommended by faculty.