



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
ETL 802	Satellite Communication and Networks Laboratory	--	--	2	--	--	1	1
		Examination Scheme						
		ISE		ESE			Total	
				Practical	Oral			
40		--	20		60			

Pre-requisite Course Codes	ETC 802: Satellite Communication and Network	
After successful completion of the course, student will be able to		
Course Outcomes	CO1	By Using basic concepts of satellite communication students will able to write programs for orbital parameters calculations.
	CO2	Students will able to Analyzes link budget of satellite signal for proper communication for given problem.
	CO3	Students will able to study satellites the benefit of society by using case study.

Exp. No.	Experiment Details	Ref.	Marks
1	To establish a direct communication link between Uplink Transmitter and Down Receiver using tone signal.		5
2	To communicate VOICE signal through satellite link.		5
3	To transmit and receive PC data through satellite link.		5
4	To perform a case study on Iridium Satellite.		5
5	To study Link Budget for uplink and downlink for satellite communication.		5
6	To find the orbital parameters of Lower Earth Orbit Satellite (SARAL –Satellite ARGOS and ALTIKA).		5
7	To perform a case study on International Space Station.		5
8	To study GPS module and find the current location using latitude and longitude		5
9	To design an Earth Station using any programming language.		5
10	To create a system with (BPSK/QPSK)modulator and demodulator.		5
11	To perform a case study on laser satellite.		5
12	To perform a case study on Satellite Link Routing.		5
*Any 08 Experiment to be performed.			Total Marks 40

References:

As per recommended by faculty.