



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	
ETL501	Microcontroller and Application Laboratory	--	--	2	--	--	1	1	
		Examination Scheme							Total
		ISE		ESE		Total			
		40		Practical	Oral		10	10	
						60			

Pre-requisite Course Codes	ETC501 : Microcontroller and Application	
After successful completion of the course, student will be able to		
Course Outcomes	CO1	Use hardware and software tools for microcontroller 8051 and ARM.
	CO2	Analyze the problem statement and write and execute an assembly language program for 8051/ARM7.
	CO3	Debug an assembly language program for 8051/ARM7.
	CO4	Document the procedure and analyze the result of an experiment.

Exp. No.	Experiment Details	Ref.	Marks
1	Study Arithmetic Instructions of 8051.		5
2	a) Search for a Byte in a array of 10 elements b) Sorting of array elements in ascending/descending order		5
3	Timer/Counter Programming for 8051.		5
4	Serial port and Interrupt programming for 8051.		5
5	Interfacing of LED & LCD panel with 8051.		5
6	Interfacing of simple/matrix keypad with 8051.		5
7	Interfacing of sensors with 8051.		5
8	Study Arithmetic Instructions of ARM7.		5
9	Generating software delay for ARM7.		5
10	Interrupt programming for ARM7.		5
11	Interfacing of LCD panel with ARM7.		5
12	Interfacing of sensors with ARM7.		5
*Any 08 Experiments to be performed.		Total Marks	40

References

As per recommended by faculty.