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
ETEL703	Neural Network and Fuzzy Logic	--	--	2	--	--	1	1
		Examination Scheme						
		ISE		ESE				Total
				Practical		Oral		
		40		--		20		60

Pre-requisite Course Codes		FEC 101 Applied Mathematics I
After successful completion of the course, student will be able to		
Course Outcomes	CO1	By using the basic concepts of neural network students will able to design of different neural networks, their architecture and training algorithm using Simbrain/Scilab/Matlab
	CO2	By using the basic concept of Fuzzy logic, Fuzzy Sets, fuzzy rules and fuzzy reasoning Students Design the applicability of neural networks and fuzzy logic using Scilab/Matlab

Exp. No.	Experiment Details	Ref.	Marks
1	Study and write program for perceptron learning rule for basic gates		5
2	Study and write program using C for perceptron learning rule for XOR gates		5
3	Study and write program for backpropogation network		5
4	Study and write program for Adaline and madaline network		5
5	Study &Design Competitive Learning network using Simbrain		5
6	Design Competitive Learning network using Simbrain for given problem		5
7	Design Hopfield network for given problem using Simbrain for given problem		5
8	Design Hebb network for given problem		5
9	To study & Design a Fuzzy model for given problem using Scilab Fuzzy Editor		5
10	Study and write program using Scilab Fuzzy Editor for image edge detection		5
*Any 08 Experiment to be performed.		Total Marks	40

References:

As per recommended by faculty.