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**
EXL7051	**Digital Image Processing Laboratory**	--	--	2	--	--	1	1
		Examination Scheme						
		ISE		ESE			Total	
				Practical		Oral		
		40		--		20		60

Pre-requisite Course Codes	EXC7051 (Digital Image Processing)

After successful completion of the course, student will be able to

Course Outcomes	CO1	Discuss the fundamental concepts of digital image processing
	CO2	Discuss image enhancement and segmentation techniques
	CO3	Apply suitable operators for binary image processing
	CO4	Apply suitable transform techniques on digital image
	CO5	Discuss digital image compression and decompression techniques

Exp. No.	Experiment Details	Ref.	Marks
1	Image Enhancement [Any one Experiment] 1.To enhance image using Histogram Equalization 2. To enhance image using Contrast Stretching		5
2	Image Enhancement [Any one Experiment] 1. To enhance image using spatial filtering 2. To perform Colour Image Enhancement		5
3	Image Segmentation [Any one Experiment] 1. To find edges using LOG and DOG 2. To find Edges using Prewit/ Sobel/ Fri-chen / Robert operators.		5
4	Image Segmentation [Any one Experiment] 1. To find edges using canny Edge Detection. 2. To implement Morphological Operators		5
5	Image Compression [Any one Experiment] 1. To compress using Huffman coding 2. To compress DCT coefficient of Image		5
6	Image Compression [Any one Experiment] 1. To compress Wavelet Coefficient of Image. 2. To compress Binary Image using Run Length Coding		5
7	Digital Watermarking		5
8	Person Tracking using DWT		5
	Total Marks		**40**

References:
As recommended by faculty.