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**
ETL701	**Image and Video Processing Laboratory**	--	--	2	--	--	1	1
		Examination Scheme						
		ISE		**ESE**				**Total**
				Practical		**Oral**		
		40		**--**		**20**		**60**

Pre-requisite Course Codes	ETC 701: Image and Video Processing	
After successful completion of the course, student will be able to		
Course Outcomes	CO1	Understand how to mathematical model image and video processing.
	CO2	Learn different techniques for image enhancement.
	CO3	Implement various techniques for image and video processing.

Exp. No.	Experiment Details	Ref.	Marks
1	To study different Image File formats.		**5**
2	To perform different operations on image. a) Sampling. b)Quantization. c)Negation. d)image conversion		**5**
3	Image enhancement by point operations. Contrast stretching, Thresholding, Gray level slicing, Brightness enhancement , Log Transform, Power Law Transform.		**5**
4	Image processing by Histogram Processing. Histogram Equalization, Histogram Specifications.		**5**
5	Spatial domain filtering using low pass filter, high pass filter and median filter.		**5**
6	To perform Homomorphic filtering.		**5**
7	Image segmentation using edge detection.		**5**
8	Morphological segmentation by Erosion and Dilation.		**5**
9	To perform edge detection in video .		**5**
10	To detect white cars in video of traffic.		**5**
11	Application in image and video processings.		**5**
*Any 08 Experiment to be performed.		**Total Marks**	**40**

References:
As per recommended by faculty.