Aditya Institute of Technology and Management (Autonomous), Tekkali
IV Year B.Tech (Electronics and Communication Engineering) – 1st Sem.
IV ECE-A, 2013-14 SEM-I

DIGITAL IMAGE PROCESSING

LESSON PLAN

Periods	Date (Tentative)	Topic	Unit No	Teaching Methodology	Remarks	Corrective Action Upon Review
1.	7-06-13	Digital image fundamentals	Unit I	Black Board(BB)		
2.	10-06-13	Applications of Digital image processing		BB		
3.	10-06-13	Digital image through scanner, Digital camera		BB		
4.	12-06-13	Distance measures		BB		
5.	14-06-13	Relationship between pixels		BB		
6.	17-06-13	Arithmetic and logical operators on pixels		BB		
7.	17-06-13	Fourier transform introduction and its properties		BB		
8.	19-06-13	Walsh & Hadamard Transform		BB		
9.	21-06-13	Discrete cosine Transform		BB		
10.	24-06-13	Haar transform & Slant transform		BB		
11.	26-06-13	Hoteling transform and its applicaitons		BB		
12.	28-06-13	Image quality and need for Image enhancement	Unit II	Black Board		
13.	01-07-13	Point processing techniques		BB		
14.	01-07-13	Point processing		BB		
15.	03-07-13	Histogram processing		BB		
16.	05-07-13	Histogram matching techniques				
17.	08-07-13	Spatial filtering, Image smoothing		BB		
18.	10-07-13	Spatial filtering , Image sharpening		BB		
19.	12-07-13	Enhancement in frequency domain	Unit III	BB		
20.	15-07-13	Image smoothing filters		BB		
21.	15-07-13	Image smoothing filters		BB		
22.	17-07-13	Image sharpening filters		BB		
23.	18-07-13	Image sharpening filters		BB		
24.	22-07-13	Concept of homo-morphic filtering		BB		
25.	24-07-13	Image Restoration Fundamentals		BB		
26.	26-07-13	Degradation model		BB		

27.	29-07-13	Algebraic approach to restoration	Unit IV	BB		
28.	31-07-13	Inverse filtering		BB		
29.	05-08-13	Least mean square filters		BB		
30.	07-08-13	Constrained Least Squares Restoration		BB		
31.	09-08-13	Interactive restoration		BB		
32.	12-08-13	Introduction- color fundamentals	Unit V	BB/PPT		
33.	14-08-13	color models		BB/PPT		
34.	16-08-13	color models		BB/PPT		
35.	19-08-13	Pseudo color image processing		BB		
36.	19-08-13	Full color image processing		BB		
37.	19-08-13	Full color image processing				
38.	21-08-13	Introduction to wavelet concept, Image pyramids	Unit VI	BB/PPT		
39.	23-08-13	Wavelet series, wavelet concept in 1-D and 2-D		BB		
40.	02-09-13	Image compression Introduction, Fidelity criteria		BB		
41.	02-09-13	Image compression models		BB		
42.	04-09-13	Huffman coding techniques		BB		
43.	06-09-13	Arithmetic coding with example		BB		
44.	09-09-13	Transform coding techniques		BB		
45.	09-09-13	Dialation and Erosion concept	Unit VII	BB		
46.	11-09-13	Opening and Closing concepts		BB/PPT		
47.	13-09-13	Morphological algorithms		BB		
48.	16-09-13	Morphological algorithms		BB		
49.	16-09-13	Morphological transformation		BB		
50.	18-09-13	Introduction to image segmentation	Unit VIII	BB/PPT		
51.	20-09-13	Detection of discontinuities, Edge linking and boundary detection		BB/PPT		
52.	23-09-13	Thresholding		BB/PPT		
53.	23-09-13	Region oriented segmentation		BB/PPT		
54.	25-09-13	Region oriented segmentation		BB		
55.	27-09-13	Explain the concept of watersheds		BB/PPT		
56.	04-10-13	Previous semester examination paper discussions- problem solving		BB		
57.	05-10-13	Previous semester examination paper		BB		

		discussions- problem solving				

Signature of the faculty

Signature of HOD/ECE