



## DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

### Lesson Plan & Work-done Diary for AY: 2025-26 - Even Semester

Course with Code: Digital Image Processing – BEC613C					Faculty: Dr.Prathibha M K		Semester & Section: VI, A & B	
Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
Bridge Course								
1		Representation of 1D and 2 D signal	Chalk & Talk & PPT	1				
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MODULE-1								
2		Introduction to Digital Image Processing, Origins of Digital Image Processing,	PPT	2				
3		Examples of fields that use DIP, Fundamental Steps in Digital Image Processing	PPT	3				
4		Components of Image Processing System	PPT	4				
5		Elements of Visual Perception	PPT	5				
6		Image Sensing and Acquisition	PPT	6				
7		Image Sampling and Quantization,	PPT	7				
8		Some Basic Relationships Between Pixels & Problems	PPT	8				
9		Problems	Chalk & Talk & PPT	9				





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MODULE-2								
10		IMAGE TRANSFORMS: Two-dimensional orthogonal	PPT	10				
11		Properties of Unitary Transforms	PPT	11				
12		Problems based on Unitary Transforms	Chalk & Talk & PPT	12				
13		Two-Dimensional DFT	PPT	13				
14		Cosine Transform,	PPT	14				
15		Problems	Chalk & Talk & PPT	15				
16		Problems	Chalk & Talk & PPT	16				
17		Haar Transform.	PPT	17				





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MODULE 3								
18		Introduction to Spatial Domain filters	PPT	18				
19		Some Basic Intensity Transformation Functions	PPT	19				
20		Some Basic Intensity Transformation Functions(contd.)	PPT	20				
21		Histogram Processing	PPT	21				
22		Problems based on Histogram Processing	Chalk & Talk & PPT	22				
23		Fundamentals of Spatial Filtering	PPT	23				
24		Smoothing Spatial Filters	PPT	24				
25		Sharpening Spatial Filters	PPT	25				
26		Problems	Chalk & Talk & PPT	26				



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MODULE 4								
27		Frequency Domain: Basics of Filtering in the Frequency Domain	PPT	27				
25		Image Smoothing	PPT	25				
26		Image Smoothing (Contd.)	PPT	26				
27		Image Sharpening Using Frequency Domain Filters	PPT	27				
29		Image Sharpening Using Frequency Domain Filters(Contd.)	PPT	29				
30		Colour Image Processing: Colour Fundamentals	PPT	30				
31		Colour Models	PPT	31				
32		Pseudo-colour Image Processing.	PPT	32				







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MODULE 5								
33		Restoration: Introduction of image degradation/restoration process	PPT	33				
34		noise models,	PPT	34				
35		noise models(Contd.)	PPT	35				
36		Restoration in the Presence of Noise Only- using Spatial Filtering	PPT	36				
37		Frequency Domain Filtering	PPT	37				
38		Inverse filtering	PPT	38				
39		minimum mean square error (Weiner) Filtering	PPT	39				
40		Discussion of VTU QP	Chalk & Talk & PPT	40				





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	Activity	Planned	Actual	Remarks
1	Theory Classes	40		
2	Assignments (Individual/Group)	3		
3	Quizzes (SRS/MS Forms)	05		
4	Tutorials/ Extra classes	-		
5	Internal Assessments	03		
6	ICT based Teaching. (% of usage in Curriculum)	80%		
Planning			Execution	
Faculty Signature:			Faculty Signature:	
HoD Signature:			HoD Signature:	

