

LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
1	04/11/13	Signals - Introduction	I	CR		
		Classification of Signals		4		
2	05/11/13	Standard basic signals		4		
3	07/11/13	Analogy between		4		
		vectors & signals		4		
		orthogonal space		4		
4	08/11/13	Signal approximation		4		
		Mean square error		4		
5	09/11/13	Closed set of orthogonal		4		
		functions		4		
6	11/11/13	Orthogonality in		4		
		Complex functions		4		
		Exponential and		4		
7,8	12/11/13	Sinusoidal signals		4		
	15/11/13	Impulse, unit step		4		
		Signum function		4		
9	16/11/13	Introduction to	II	4		
		Fourier Series		4		
10	18/11/13	Representation of		4		
		Fourier series		4		

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		CT periodic signal		CR		
11	19/11/13	Properties of Fourier Series		4		
12	21/11/13	Dirichlet's Conditions		4		
13	22/11/13	Trigonometric Fourier Series		4		
14, 15	23/11/13 25/11/13	Problems on Trigonometric Fourier Series		4		
16	26/11/13	Exponential Fourier Series representation		4		
17	28/11/13	Example problems		4		
18	29/11/13	Complex Fourier Spectrum		4		
19	30/11/13	Introduction to Fourier Transform	III	4		
		Deriving F.T from Fourier Series				
20	02/12/13	F.T of arbitrary signal, Inverse Fourier Transform		4		

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21	3/12/13	Fourier transform of standard signals		CR		
22	5/12/13	F.T of periodic signals		4		
23, 24	6/12/13 7/12/13	Properties of Fourier transforms.		4		
25	9/12/13	F.T of impulse function and signum function.		4		
		Introduction to Hilbert transform				
26	10/12/13	Signal transmission through linear system	IV	4		
27	12/12/13	Linear system, impulse response, response of a linear system		4		
28	13/12/13	LTI & LTV system transfer functions		4		
29	14/12/13	Filter characteristics		4		
30	16/12/13	Distortionless transmission		4		

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		through a system		CR		
31	17/12/13	Signal bandwidth		4		
		System bandwidth				
32,33	19/12/13	Ideal LPF, HPH &		4		
	20/12/13	BPF characteristics		4		
34	21/12/13	Poly-Wiener criterion		4		
35	30/12/13	Concept of Convolution ∇		4		
		in time domain &				
		frequency domain				
36	31/12/13	Graphical representation		4		
37	02/01/14	Cross correlation &		4		
		auto correlation				
38	03/01/14	Properties		4		
39	04/01/14	Energy density		4		
		Spectrum				
		Parseval's theorem				
40	06/01/14	Power density		4		
		Spectrum				
41	07/01/14	Relation between		4		
		convolution & correlation				

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42	9/01/14	Detection of periodic signals in presence of noise by Correlation		CR		
43	10/01/14	Extraction of signal from noise filtering		"		
44	11/01/14	Sampling theorem VI Proof for band-limited signals		"		
45	17/01/14	Natural & Flat top sampling		"		
46	18/01/14	Reconstruction of signal from its samples		"		
47, 48	20/01/14	Aliasing effect		"		
	21/01/14	Problems on Nyquist rate		"		
49	22/01/14	Introduced into band pass filtering		"		
50	24/01/14	Laplace Transform VII introduction		"		
51	25/01/14	Partial fraction expansion		"		
52	27/01/14					
53	28/01/14	Inverse Laplace Transform		"		

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Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
54	30/01/14	Concept of ROC		CL		
55, 56	31/01/14 01/02/14	Properties of Laplace transform		4		
57	02/02/14	Relation between F.T and L.T		4		
58	04/02/14	Laplace transform of certain signals		4		
59, 60	06/02/14	Laplace transform using contour		4		
61	08/02/14	System		4		
62	8/02/14	Introduction to \overline{z} -transform		4		
		Fundamental difference between CT & DT signal				
63	10/02/14	Periodicity of discrete time using complex exponential signal		4		
64	13/02/14	Concept of \overline{z} -transform		4		
65	14/02/14	Properties		4		
66	15/02/14	Relation between				
67, 68	17/02/14 20/02/14	F.T, L.T & \overline{z} -T, ROC		4		
69	21/02/14	Inverse \overline{z} -transform				