



Department of Mathematics

SEMESTER : IV
BRANCH : EC D
SUBJECT : ENGG MATHS IV
SUBJECT CODE : 15MAT41
NO OF HRS/WK : 6

NAME OF THE FACULTY : Dr.K.Meenakshi
DATE OF COMMENCEMENT : 13.02.2017
DATE OF CLOSING : 02.06.2017
CLASS STRENGTH : 55
TOTAL HOURS : 67

S. No	Chapter no (No of hrs planned for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignments/Tests planned for the chapter	Topics covered As per plan
1	3/3	13.2.17 -5.2.17	Complex Variables: Review of a function of a complex variable, limits, continuity, differentiability.	Chalk, Duster		
2	2/3	16.2.17 -7.2.17	Analytic functions-Cauchy-Riemann equations in Cartesian forms.	„		
3	1/3	18.2.17	Cartesian equations in polar form	„		
4	1/3	20.2.17	Properties of analytic functions.	„	Assignment- I	
5	2/3	21.2.17 -2.2.17	Properties and construction of analytic functions.	„		
6	2/3	23.2.17 - 24.2.17	Complex line integrals-Cauchy's theorem and Cauchy's integral formula	„		
7	3/3	27.2.17 - 1.03.17	Residue, poles, Cauchy's Residue theorem (without proof) and problems	„		

8	4/3	02.03.17-6.03.17	Transformations: Conformal transformations, discussion of transformations: $w = z^2$, $w = e^z$, $w = z + (1/z), (z \neq 0)$	„		
9	1/3	7.03.17	Discussion of transformations: $w = z + (1/z), (z \neq 0)$, problems	„	Assignment- II	
10	1/3	8.03.17	Bilinear transformations-problems	“	Revision Test I	
11	2/2	9.03.17 10.03.17 7	Special Functions: Series solution-Frobenius method.	„		
12	3/2	11.3.17 13.3.17	Series solution of Bessel's differential equation leading to $J_n(x)$ -Bessel's function of first kind.	„		
13	2/2	14.3.17 15.3.17	Bessel's function of first kind-properties	„		
14	2/2	16.7.13 17.7.13	Bessel's function -recurrence relations and orthogonality.	„		
15	3/2	18.3.17 20.3.17	Series solution of Legendre's differential equation leading to $P_n(x)$ -	„	Assignment- III	
16	2/2	21.3.17 22.3.17	Legendre polynomials	„		
17	½	22.3.17	Rodrigue's formula, problems	“	Revision Test II	
18	2/4	31.3.17 -1.4.17	Probability Distributions: Random variables (discrete and continuous), probability mass/density functions.	“		
19	1/4	3.4.17	Binomial distribution	“		
20	1/4	4.4.17	Poisson distribution	„		
21	1/4	5.4.17	Exponential distributions-problems	„	Assignment –IV	
22	1/4	6.4.17	Normal distribution problems	„		
23	4/5	17.4.17 18.4.17	Sampling Theory: Sampling, Sampling distributions, standard error,			
24	1/5	19.4.17 20.4.17	Test of hypothesis for means and proportions			

25	1/5	21.4.17 22.4.17	Confidence limits for means	„		
26	1/5	23.4.17	Confidence limits for means-problems	„		
27	1/5	24.4.17	Student's t-distribution			
28	1/5	25.4.17	Student's t-distribution		Revision Test III	
29	1/5	26.4.17	Chi-square distribution as a test of goodness of fit.			
30	1/5	27.4.17	Chi-square distribution as a test of goodness of fit-- problems		Assignment –V	
31	1/5	28.4.17	Test of hypothesis for means and proportions			
32	1/5	30.4.17	Test of hypothesis for means and proportions	„		
33	1/5	2.5.17- 4.5.17	Stochastic process: Stochastic processes, probability vector	„		
34	1/5	5.5.17- 6.5.17	Stochastic matrices, fixed points, regular stochastic matrices,	„		
35	4/5	11.5.17	Markov chains, higher transition probability, simple problems.	„	Assignment –VI	
36	1/1	12.5.17	Numerical Methods: Numerical solution of ordinary differential equations of first order and first degree	„	RevisionTest IV	
37	1/1	12.5.17	Taylor's series method	“		
38	1/1	13.5.17	Taylor's series method			
39	1/1	15.5.17	Modified Euler's method	„		
40	1/1	16.5.17	Modified Euler's method	„		
41	1/1	17.5.17	Runge - Kutta method of fourth order	„		
42	1/1	18.5.17	Milne's Method	„		
43	1/1	19.5.17	Adams Bashforth Method	„	Assignment –VII	
44	1/1	20.5.17	Numerical Methods: Numerical solution of second order ordinary differential equations : Runge-Kutta method	„		

45	1/1	20.5.17	Numerical solution of second order ordinary differential equations : Runge Kutta Method	„		
46	1/1	22.5.17	Numerical solution of second order ordinary differential equations : Milne’s method	„	Assignment –VIII	
47	1/1	23.5.17	Numerical solution of second order ordinary differential equations : Milne’s method	„	Revision Test V	
48	3/1	24.5.17	Revision	„		

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#132, AECS Layout, IT Park Road, Kundalahalli, Bangalore – 560 037

T:+9180 28524466 / 77

**CMR INSTITUTE
OF TECHNOLOGY**



Session wise – Course Plan

Department of Electronics and Communication Engg

SEMESTER : IV

NAME OF THE FACULTY : Parikshith Savanth

BRANCH : ECE

DATE OF COMMENCEMENT : 13.02.17

SUBJECT : CS

DATE OF CLOSING : 23.05.17

SUBJECT CODE : 15EC43

CLASS STRENGTH : 105

NO OF HRS/WK : 6

TOTAL HOURS : 70

Session No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignments/ Tests planned for the chapter	Topics covered As per plan
1	Prerequisite	13.02.17	Introduction to Laplace Transform	Board, chalk, duster		
2	Prerequisite	13.02.17	Inverse Laplace Transform	„		
3	1/1	14.02.17	Introduction to Control System	„	Assignment-1	
4	1/2	14.02.17	Introduction to mechanical systems	„		
5	1/3	15.02.17	Translational and Rotational systems	„		
6	1/4	16.02.17	Force Voltage and Force-Current Analogous systems	„		
7	1/5	17.02.17	Problems on Analogous systems	„		

8	1/6	18.02.17	Problems on Analogous systems	„		
9	1/7	20.02.17	Transfer functions	„		
10	1/8	21.02.17	Problems on Transfer functions	„		
11	1/9	22.02.17	Effect of feedback systems	„		
12	1/10	23.02.17	Block Diagram algebra	„		
13	1/11	27.02.17	Problems on Block Diagram	„		
14	1/12	28.02.17	Problems on Block Diagram	„		
15	1/13	01.03.17	Problems on Block Diagram	„		
16	1/14	02.03.17	Introduction to Signal Flow Graphs	„		
17	1/15	06.03.17	Problems on Signal Flow Graphs	„		
18	1/16	07.03.17	Problems on Signal Flow Graphs	„		
19	2/1	08.03.17	Standard test signals	„	Assignment -II	

20	2/2	09.03.17	Unit step response of First order Systems	„		
21	2/3	10.03.17	Unit step response of Second order Systems	„		
22	2/4	11.03.17	Analysis of second order systems	„		
23	2/5	13.03.17	Time response specifications	„		
24	2/6	14.03.17	Time response specifications	„		
25	2/7	15.03.17	Steady state errors	„		
26	2/8	16.03.17	Problems	„		
27	2/9	17.03.17	Problems	„		
28	2/10	18.03.17	Problems	„		
29	2/11	20.03.17	Introduction to P, I and D	„		
30	2/12	21.03.17	PI and PID controllers	„		
31	3/1	22.03.17	Concepts of stability	„	Assignment -III	

32	3/2	23.03.17	Necessary conditions for Stability	„		
33	3/3	24.03.17	Routh stability criterion	„		
34	3/4	31.03.17	Relative stability analysis	„		
35	3/5	01.04.17	Problems	„		
36	3/6	03.04.17	Problems	„		
37	3/7	04.04.17	Introduction to Root-Locus Techniques and	„		
38	3/8	05.04.17	Construction of root loci.	„		
39	3/9	06.04.17	Problems	„		
40	3/10	07.04.17	Problems	„		
41	3/11	08.04.17	Problems	„		
42	5/1	10.04.17	Introduction to Digital Control System	„	Assignment –IV	
43	5/2	11.04.17	Spectrum Analysis of Sampling process	„		
44	5/3	12.04.17	Signal reconstruction	„		

45	5/4	13.04.17	Signal reconstruction	„		
46	5/5	17.04.17	Difference equations	„		
47	5/6	18.04.17	Problems	„		
48	5/7	19.04.17	Problems	„		
49	5/8	20.04.17	Concept of State, State variables	„		
50	5/9	21.04.17	State variables & State model	„		
51	5/10	22.04.17	State model for Linear Continuous systems	„		
52	5/11	24.04.17	State model for Discrete time systems	„		
53	5/12	25.04.17	Diaganolisation	„		
54	5/13	26.04.17	Problems	„		
55	5/14	27.04.17	Problems	„		
56	5/15	28.04.17	Problems	„		

57	4/1	02.05.17	Phase reversal, over load.	,	Assignment -V	
58	4/1	03.05.17	Correlation between time and frequency response			
59	4/1	04.05.17	Bode Plots			
60	4/1	05.05.17	Problems			
61	4/1	11.05.17	Problems			
62	4/1	12.05.17	Introduction to Polar Plots			
63	4/1	13.05.17	Problems			
64	4/1	15.05.17	Nyquist Stability criterion			
65	4/1	16.05.17	Problems			
66	4/1	18.05.17	Lag, Lead and Lag-Lead Network			
67	4/1	19.05.17	Problems			
68		20.05.17	Revision			
69		22.05.17	Revision			

70		23.05.17	Revision			

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T:+9180 28524466 / 77

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Session wise – Course Plan

Department of Electronics and Communication

SEMESTER : IV

NAME OF THE FACULTY : Madhusudan

BRANCH : ECE

DATE OF COMMENCEMENT : 13/02/2017

SUBJECT : Microprocessors

DATE OF CLOSING : 02/06/2017

SUBJECT CODE : 15EC42

CLASS STRENGTH : 50/57

NO OF HRS/WK : 05

TOTAL HRS : 50

Session No	Chapter no (No of hrs planned for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignments/ Tests planned for the chapter	Topics covered As per plan
1	1/1	13/02/17	Historical background	Board, chalk, duster		Historical background
2	2/1	14/02/17	8086 CPU Architecture	”		8086 CPU Architecture
3	3/1	15/02/17	8086 CPU Architecture	“		8086 CPU Architecture
4	4/1	16/02/17	Addressing modes	“		Addressing modes
5	5/1	17/02/17	Machine language instruction formats,	“		Data transfer and arithmetic instructions.
6	6/1	20/02/17	Machine language instruction formats,	”		Control/Branch Instructions
7	7/1	21/02/17	Machine coding the program	“		Control/Branch Instructions
8	8/1	22/02/17	Data transfer and arithmetic instructions.	“		Illustration of these instructions with example programs
9	9/1	23/02/17	Control/Branch Instructions	“		Logical Instructions

10	10/1	24/02/17	Illustration of these instructions with example programs	„	Assignment 1 on Module 1	String manipulation instructions
11	1/2	27/02/17	Logical Instructions	“		Flag manipulation
12	2/2	28/02/17	String manipulation instructions	“		Processor control instructions
13	3/2	01/03/17	Flag manipulation	“		Illustration of these instructions with example programs
14	4/2	02/03/17	Processor control instructions	„		Illustration of these instructions with example programs
15	5/2	03/03/17	Illustration of these instructions with example programs	“		Cultura 2K17
16	6/2	06/03/17	Assembler Directives	“		Assembler Directives
17	7/2	07/03/17	Assembler Directives and Operators,	“		Assembly Language Programming and example programs
18	8/2	08/03/17	Assembly Language Programming and example programs	„		
19	9/2	09/03/17	Programming examples	“		
20	10/2	10/03/17	Programming examples	“	Assignment 2 on module 2	

21	1/3	13/03/17	Introduction to stack	“		
22	2/3	14/03/17	Programming for Stack.	”		
23	3/3	15/03/17	Interrupts and Interrupt Service routines	“		
24	4/3	16/03/17	Interrupt cycle of 8086, NMI, INTR,	“		
25	5/3	17/03/17	Passing parameters to procedures	“		
26	6/3	20/03/17	Macro S	”		
27	7/3	21/03/17	Timing and Delays	“		
28	8/3	22/03/17	Programming examples	“		
29	9/3	23/03/17	Programming examples	“		
30	10/3	24/03/17	Programming examples	”	Assignment 3 on module 3	
31	1/4	27/03/17	8086 Bus Configuration and Timings: Physical memory Organization,	“		

32	2/4	28/03/17	General Bus operation cycle,	"		
33	3/4	29/03/17	I/O addressing capability	"		
34	4/4	30/03/17	Special processor activities	"		
35	5/4	31/03/17	Minimum mode 8086 system, Timing diagrams	"		
36	6/4	03/04/17	Maximum Mode 8086 system Timing diagrams	"		
37	7/4	04/04/17	Basic Peripherals and their Interfacing with 8086 (Part 1): Static RAM Interfacing with 8086	"		
38	8/4	05/04/17	Interfacing I/O ports, PIO 8255	"		
39	9/4	06/04/17	Modes of operation – Mode-0 and BSR Mode	"		
40	10/4	07/04/17	Interfacing Keyboard and 7-Segment digits using 8255	"	Assignment 4 on module 4	
41	1/5	10/04/17	Basic Peripherals and their Interfacing with 8086 (Part 2): Interfacing ADC-0808/0809,	"		
42	2/5	11/04/17	DAC-0800	"		
43	3/5	12/04/17	Stepper Motor using 8255	"		
44	4/5	13/04/17	Timer 8254 – Mode 0, 1, 2 & 3 Interfacing programmes for these modes	"		

45	5/5	17/04/ 17	INT 21H DOS Function calls - for handling Keyboard and Display	“		
46	6/5	18/04/ 17	Other Architectures: Architecture of 8088	”		
47	7/5	19/04/ 17	Architecture of NDP 8087	“		
48	8/5	20/04/ 17	Von-Neumann & Harvard CPU architecture	“		
49	9/5	21/04/ 17	CISC & RISC CPU architecture	“		
50	10/5	24/04/ 17	Revision of module 5	“	Assignment 5 on module 5	

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Session wise – Course Plan

Department of Telecommunication

SEMESTER : IV

NAME OF THE FACULTY : Krishna Teja

BRANCH : ECE

DATE OF COMMENCEMENT: 13/02/2017

SUBJECT : Signals & Systems

DATE OF CLOSING : 02/06/2017

SUBJECT CODE: 15EC44

CLASS STRENGTH : 57/48

NO OF HRS/Weak : 6

TOTAL HRS : 70

Sessi on No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignm ents/ Tests planned for the chapter	Topics covered As per plan
1	1/1		MODULE-I: Introduction to the subjects. What is signals? What is systems?	Board, chalk, duster		
2	2/1		Classification Of Signals: Cont. And Discrete Time Signals. Sampling of analog Signals.	„		
3	3/1		Deterministic and Non- Deterministic Signals, Even and Odd Signals	„		
4	4/1		Even and Odd Signals	„		
5	5/1		Periodic and Non-Periodic Signals	„		
6	6/1		Periodic and Non-Periodic	„		
7	7/1		Energy Signals and Power Signals	„		

8	8/1		Energy Signals and Power Signals	„	A1	
9	9/1		Elementary signals	„		
10	10/1		Elementary Signals	„		
11	11/1		Operations on Signals	„		
12	12/1		Operations on Signals	„		
13	13/1		Problems on Signals	„		
14	14/1		Properties of Systems	„		
15	15/1		Properties of Systems	„		
16	16/1		Problems on Module-1	„		
17	17/1		Problems on Module-1	„		
18	1/2		MODULE-II: LTI System, Convolution Sum	„		
19	2/2		Problems on Convolution Sum	„		
20	3/2		Problems on Convolution Sum	„	A2	
21	4/2		Properties of Convolution	„		
22	5/2		Convolution Integral	„		
23	6/2		Problems on Convolution integral	„		
24	7/2		Graphical Method of Convolution	„		
25	8/2		Graphical Method of Convolution	„		
26	9/2		Properties of Convolution	„		
27	10/2		Problems and Doubt Solving on Convolution	„		
28	11/2		Problems and Doubt Solving on Convolution	„		

29	1/3		MODULE-III: System interconnection, system properties in terms of Impulse response.	„		
30	2/3		Step response in terms of impulse response.	„	A3	
31	3/3		Fourier Series: Complex Sinusoidal, Eigen value & Eigen function	„		
32	4/3		CTFS, Frequency Response, Magnitude Spectrum, Phase Spectrum	„		
33	5/3		Properties of CTFS	„		
34	6/3		Problems on CTFS	„		
35	7/3		Problems on CTFS	„		
36	8/3		DTFS	“		
37	9/3		Properties of DTFS	„		
38	10/3		Problems on DTFS	„		
39	11/3		Problems	„		
40	1/4		MODULE-IV: CT Fourier Transform, Magnitude And Phase Spectrum	„		
41	2/4		Basic Problems on CTFT	„	A4	
42	3/4		Properties of CTFT	„		
43	4/4		Properties of CTFT	„		
44	5/4		Problems on CTFT	„		
45	6/4		Problems on CTFT	„		

46	7/4		DTFT, Magnitude And Phase Spectrum	„		
47	8/4		Basic Problems on DTFT	„		
48	9/4		Properties of DTFT	„		
49	10/4		Properties of DTFT	„		
50	11/4		Problems on DTFT	„		
51	12/4		Problems on DTFT	„		
52	13/4		Sampling Theorem and Reconstruction of signals	„		
53	14/4		Problems on Sampling Theorem	„		
54	15/4		Problems and Doubt solving	„		
55	1/5		MODULE-V: Z-Transform: Basic Concepts	„		
56	2/5		Problems on Z-Transform & Roc Concept	„	A5	
57	3/5		Problems on Z-Transform And Roc	„		
58	4/5		Properties of Z-Transform	„		
59	5/5		Properties of Z-Transform	„		
60	6/5		Problems based on Properties Of Z-Transform	„		
61	7/5		Inverse Z-Transform	„		
62	8/5		Inverse Z-Transform	„		
63	9/5		LTI system using Z-Transform	„		
64	10/5		LTI system using Z-Transform	„		
65	11/5		Unilateral Z-Transform	„		

66	12/5		Problems	„		
67	13/5		Problems and doubt solving	„		
68	--		Solving VTU Questions	„		
69	--		Solving VTU Questions	„		
70	--		TEST			

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