

Course: Principles of Signals and Systems

Course Code: noc19-ee07

Session: 2018-19

Duration: 12 Weeks

Assessment procedures: Weekly Assignment (25%) + proctored certification Exam (75%)

Curriculum of the Course:

Week 1: Introduction to Signals, Signal Classification, Continuous/ Discrete Time Signals

Week 2: Definition and Classification of Systems, Linear Time Invariant (LTI) Systems

Week 3: Properties of LTI Systems, Impulse Response, Convolution, Causality, Stability

Week 4: Impulse Response of Discrete Time Systems, Discrete Time Convolution, Difference Equations and Analysis

Week 5: Laplace Transform, Properties of Laplace Transform, Inverse Laplace Transform

Week 6: Introduction to z-Transform, Properties of z-Transform, Region of Convergence, Inverse z-Transform

Week 7: Introduction to Fourier Analysis, Fourier Series for Periodic Signals, Properties of Fourier Series

Week 8: Introduction to Fourier Transform, Properties of Fourier Transform, Frequency Response of Continuous Time Systems, Examples of Frequency Response

Week 9: Fourier Analysis of Discrete Signals, Discrete Time Fourier Transform (DTFT), Properties of DTFT, Examples of DTFT

Week 10: Frequency Response of Discrete Time Systems, Discrete Fourier Transform (DFT), Properties of DFT, Examples of DFT

Week 11: IIR/ FIR Filters, Direct Form Realization, Cascade and Parallel Form Realization, Problem Solving

Week 12: Concept of State, State Space Analysis, State Space Representation of Continuous Time Systems, Solution of State Equations for Continuous Systems

List of students enrolled

S. No.	Name
1	Shankar Sharma
2	Aditya Dadhich
3	Tarun
4	Ananya
5	Anjali Parik
6	Anmol Kumar Joshi
7	Rohit Arora

8	Arpit Gupta
9	Ashish Yadav
10	Avik Sharma
11	Baibhav Kumar
12	Atul Jain
13	Rishika Jain
14	Himanshu Jain
15	Kanak Agrawal
16	Kartik Tank
17	Harsh Khandelwal
18	Rishi Maheshwari
19	Sushant Kumar
20	Jayant Kumawat
21	Manish Faujdar
22	Manvendra Shekhawat
23	Yashaswi Mathur
24	Aayushi Meena
25	Nikita Modi
26	Monalisa
27	Nitish Kumar Thapar
28	Pramod Meena
29	Pratik Mangla
30	Prerna Verma
31	Rajkumar Verma
32	Priya Gupta
33	Rajat Jangid
34	Pradeep Rawat
35	Ravi Jain
36	Sachin Olkha
37	Rajkumar Saini
38	Sanskar Sonkhiya
39	Shubham Sharma
40	Shweta Mittal
41	Shikha Singh
42	Surbhi Maheshwari
43	Sushobhit Nigam
44	Ujjawal Matolia
45	Rajat Verma
46	Vishakha Agarwal