

# **Course: Control Engineering**

**Course Code:** noc19-ee30

**Session:** 2018-19

**Duration:** 12 Weeks

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

## **Curriculum of the Course:**

Week 1:

- Mathematical Modelling of Systems

Week 2:

- Laplace Transforms
- Transfer functions
- Block diagram representation.

Week 3 :

- Block diagram reduction
- Time response characteristics.

Week 4 :

- Introduction to stability
- Routh Hurwitz stability criterion

Week 5 :

- Root locus plots
- Stability margins.

Week 6 :

- Frequency response analysis: Nyquist stability criterion
- Bode plots and stability margins in frequency domain.

Week 7 :

- Basics of control design
- The proportional
- Derivative and integral actions

Week 8 :

- Design using Root Locus

Week9 :

- Design using Bode plots

Week 10 :

- Effects of zeros, minimum and non-minimum phase systems.

Week 11 :

- State space analysis

Week 12 :

- Design using State space

### List of students enrolled

S.No.	Name of Student
1	kirti kumawat
2	Aayush Jain
3	abhishek gupta
4	Abhishek sharma
5	aditya kumar gupta
6	Tarun
7	Deepak Agrawal
8	Aman gupta
9	Ananya Tiwari
10	ashok jagariya
11	ashok jagariya
12	atul sharma
13	himanshu awsthi
14	Mukul kumar
15	sunita choudhary
16	MOHD DANISH
17	lakshya
18	gaurav soni
19	himanshu soni
20	Madhvendra singh
21	aditya sharma
22	Manish Kucheria
23	Manmohan Singh Shekhawat
24	manvendra singh rathore
25	aayushi meena
26	kaushal kumar meens
27	Monika Sharma
28	kunal Sharma
29	muskan yogi
30	Nikhil bhardwaj
31	nishpax jain
32	pawan kumar
33	priyanka meena
34	Pragya jain

35	Pragya Sharma
36	Ritika gupta
37	Roopal Singh
38	Shaiphali Maheshwari
39	shrayansh
40	Shubham Mathur
41	shikha singh
42	Sushil kumar sharma
43	Taruna Garg
44	lalit kishor tiwari
45	Unnati
46	Vaibhav Kulshrestha
47	VIKAS
48	VINIT JEENGAR
49	vipin swami
50	vaibhav jain

