



Course Contents

5 Days Workshop on Designing and analyzing Control system by using
MATLAB & SIMULINK

Sr. No	Topic
Designing & Analyzing controller by using MATLAB and SIMULINK	
1	Introduction to Laplace Transform
2	State space Model, Transfer function, Signal Flow graphs
3	Linearization of non linear systems
4	Response of systems
5	Transient and steady state analysis
6	Stable and unstable and conditionally stable systems and Routh's stability Criterion
7	Root locus of system
8	SISO tool of MATLAB and root locus analysis by using MATLAB
9	Feed forward, Feed back system and positive and negative feedback
10	Transport LAG of systems and root loci
11	Consideration for designing control system
13	Types of control systems
14	Control Systems design by using Root locus Method
15	Lead, Lag and lead-lag compensators
16	Frequency Response analysis, Bode, Nyquist plots
17	Experimental determination of transfer function by using Bode plots
18	Control system Design by frequency response Lead, Lag and lead-lag
19	PID controller, its effects and tuning rules



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