

M.Tech. in Systems and Control Engineering

(Department of Electrical Engineering)

Fractal Course structure (Applicable to Aug. 2017 onwards)

Semester – I

Course No.	Course Title	Credits
EE5440	Classical control techniques for MIMO systems (Core-1)	1
EE5450	State feedback control (Core-2)	2
EE5817	Random Variables (Core-3)	2
EE5827	Random Processes (Core-4)	1
CH6640	Optimization Techniques (Core-5)	2
	Electives	4-6
	Total	12-14

Semester – II

Course No.	Course Title	Credits
EE5460	Analysis of Nonlinear Systems (Core-6)	2
EE5221	Advanced Control Lab (Core Lab)	2
EE5406	Systems & Control Seminar	2
	Electives	8-6
	Total	14-12

Semester – III

Course No.	Course Title	Credits
EE6415	M.Tech. Stage-1	10
	Total	10

Semester – IV

Course No.	Course Title	Credits
EE6425	M.Tech. Stage-2	12
	Total	12

List of Core Electives:

- Nonlinear Control Techniques
- Robust Control Techniques
- Optimal Control
- Digital Signal Processing
- Embedded Systems
- Digital IC design and verification
- Numerical Methods
- Sensors and Transducers in Health care
- Pattern Recognition
- Image and Video Processing
- Modelling and Simulation
- Measure Theoretic Probability
- Convex Optimization
- Wavelets and Applications
- Numerical Analysis
- Fourier Analysis and Applications
- Advanced Topics in Mathematical Tools
- Numerical Linear Algebra for Data Analysis
- Adaptive Signal Processing