

Unit I

Chapter 1 : Random Processes & Noise 1-1 to 1-40

Syllabus : Random processes : Introduction, Mathematical definition of a random process, Stationary processes, Mean, Correlation and Covariance function, Ergodic processes, Transmission of a random process through a LTI filter, Power spectral density. **Mathematical representation of Noise :** Some sources of noise, Frequency domain representation of noise, Superposition of noises, Linear filtering of noise, Quadrature components of noise, Representation of noise using orthonormal coordinates.

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	• Appendix F	F-3

