

Course Name: Introduction to Signals and Systems

Topic 1: Classification of Signals and Systems:

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Outline:

- Discrete and Continuous Signals
- Signals of Significance (Sinusoids, Exponentials, Step and Impulse Signals)
- Basic Operations on Signals
- Discrete and Continuous Systems
- Classification of Systems
 - Linear and Non-linear
 - Stable and Unstable
 - Causal and Non-causal
 - Time-varying and Time-invariant
- LTI Systems and Convolution

Prerequisites:

- Familiarity with basic mathematics (functions, exponential and sinusoidal functions)

Reference:

A.V. Oppenheim and A.S. Willksy, "Signals and Systems", 2nd edition, Prentice Hall India, 1996.

Semester: 3