

# NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

NPTEL Video Course - Electrical Engineering - Digital Signal Processing

Subject Co-ordinator - Prof. T.K. Basu

Co-ordinating Institute - IIT - Kharagpur

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

Lecture 1 - Discrete Time Signal and System  
Lecture 2 - Discrete Time Signal and System (Continued...)  
Lecture 3 - Discrete Time Signal and System (Continued...)  
Lecture 4 - Frequency Domain Representation of Discrete Signals  
Lecture 5 - Z-Transform  
Lecture 6 - Z-Transform (Continued...)  
Lecture 7 - Solution of Difference Equation  
Lecture 8 - Tutorial on Discrete Time Signals & Their Transforms  
Lecture 9 - Relation Between Discrete Time and Continuous Signals  
Lecture 10 - Discrete Fourier Transform (DFT)  
Lecture 11 - Discrete Fourier Transform (DFT) (Continued...)  
Lecture 12 - Discrete Fourier Transform (DFT) (Continued...)  
Lecture 13 - State Space Representation  
Lecture 14 - Filters Introduction  
Lecture 15 - FIR Filters  
Lecture 16 - FIR Filters (Continued...) Introduction to IIR Filters  
Lecture 17 - IIR Filters (Continued...)  
Lecture 18 - IIR Filters (Continued...)  
Lecture 19 - IIR Filters (Continued...)  
Lecture 20 - Tutorial & Introduction to Computer Aided Design of Filters  
Lecture 21 - Computer Aided Design of Filters  
Lecture 22 - FFT and Computer Aided Design of Filters  
Lecture 23 - Introduction to Lattice Filter  
Lecture 24 - Lattice Filter (Continued...)  
Lecture 25 - Effects of Quantization  
Lecture 26 - Effects of Quantization (Continued...)  
Lecture 27 - Effects of Quantization (Continued...)  
Lecture 28 - Effects of Quantization (Continued...)  
Lecture 29 - Random Signals

---

Get Digi-MAT (Digital Media Access Terminal) For High-Speed Video Streaming of NPTEL and Educational Video Courses in LAN

[www.digimat.in](http://www.digimat.in)

## NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

---

- Lecture 30 - Relationship Between Real and Imaginary Parts of DTFT
- Lecture 31 - Relationship Between Real and Imaginary Parts of DTFT
- Lecture 32 - Relationship Between Real and Imaginary Parts of DTFT
- Lecture 33 - Multi rate Signal Processing
- Lecture 34 - Multi rate Signal Processing (Continued...)
- Lecture 35 - Polyphase Decomposition