

Date:- 03-Aug-2020

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Course:- Digital Signal processing 1:

AA18EC049

Basic Concepts and Algorithms:-

4<sup>th</sup> Sem, A' Sec

• Module 1.1: Digital Signal processing: the Basics.

→ What is Signal processing?

- Introduction

- What is digital signal processing.

→ Discrete-time Signals

- Introduction

- Discrete time Signals

→ Basic Signal processing.

- Introduction

- How your PC plays discrete-time Signals.

- The Karplus-Strong's algorithm.

→ Complex exponentials

- Introduction

- Complex exponentials.

→ Notes and Supplementary Materials  
Signal of the Day: Goethe's Temperature

→ Python notebooks:-

→ Transoceanic signal Transmission  
→ The Karplus-storing Algorithm.

- Energy and power : periodic signals

$$E_{\bar{x}} = \infty$$

$$P_{\bar{x}} = \frac{1}{N} \sum_{n=0}^{N-1} |\bar{x}[n]|^2$$