

C.V.RAMAN POLYTECHNIC, BHUBANESWAR

LESSON PLAN

Session (2025-2026)

Discipline: Electronics & Telecommunication Engineering	Semester: 4 th Semester, Summer/2026	Name of the Faculty: Suchismita Satpathy, Asst. Prof. Email ID: suchismita@cvrp.edu.in
Subject: DIGITAL SIGNAL PROCESSING (ETCPE202 (a))	No. Of Days/Week: 03	Start Date: 22/12/2025 End Date: 18/04/2026

Week	Class Day	Theory Topics
1st	1st	Discrete Time Signals-Sequences
	2nd	Representation of signals on orthogonal basis
	3rd	Sampling and reconstruction of signals
2nd	1st	Discrete systems attributes
	2nd	Z-Transform
	3rd	Z-Transform
3rd	1st	Analysis of LSI systems
	2nd	Frequency Analysis
	3rd	Inverse Systems
4th	1st	Discrete Fourier Transform (DFT)
	2nd	Fast Fourier Transform Algorithm
	3rd	Fast Fourier Transform Algorithm
5th	1st	Implementation of Discrete Time Systems
	2nd	Discrete Fourier Transform (DFT)
	3rd	Implementation of Discrete Time Systems
6th	1st	Design of FIR Digital Filters
	2nd	Window method
	3rd	Park-McClellan's method
7th	1st	Design of IIR Digital Filters
	2nd	Butterworth
	3rd	Chebyshev
8th	1st	Elliptic Approximations
	2nd	Low pass filters
	3rd	Band pass filters
9th	1st	Band stop filters

	2nd	High pass filters.
	3rd	Doubt clearing & Problem Solving class.
10th	1st	Doubt clearing & Problem Solving class.
	2nd	Finite Register Length in FIR Filter Design
	3rd	Effect of finite register length in FIR filter design
11th	1st	Effect of finite register length in FIR filter design
	2nd	Parametric and non-parametric spectral estimation
	3rd	Parametric and non-parametric spectral estimation
12th	1st	Introduction to multirate signal processing
	2nd	Doubt clearing & Problem Solving class.
	3rd	Applications of DSP
13th	1st	Application of DSP to Speech signal processing.
	2nd	Application of DSP to Speech signal processing.
	3rd	Application of DSP to Speech signal processing.
14th	1st	Application of DSP to Radarsignal processing.
	2nd	Application of DSP to Radarsignal processing.
	3rd	Doubt clearing & Problem Solving class.
15th	1st	Doubt clearing & Problem Solving class.
	2nd	Previous Year Question Discussion.
	3rd	Previous Year Question Discussion.

Concerned Faculty



H.O.D.

