

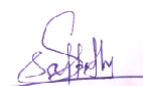
C.V.RAMAN POLYTECHNIC, BHUBANESWAR

LESSON PLAN Session (2025-2026)

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| 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 |

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| | 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.