|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl.No.** | **Syllabus** | **Curriculum** | **Deployment Strategy and Tool** | **Cross-cutting issues integrated** | **PO, PSO and CO** |
| 1. | Digital Communication | * Understand the mathematical representation of signal, symbol, and noise. * Understand the concept of signal processing of digital data and signal conversion to symbols at the transmitter and receiver * Compute performance metrics and parameters for symbol processing and recovery in ideal and corrupted channel conditions * Compute performance parameters and mitigate channel induced impediments in corrupted channel conditions. | 1. Chalk and Talk method 2. PPT | * Environment and sustainability. | * PO1, PO2, PO3, PO4, PO5, PO6 |
| * PSO1,PSO2,PSO3 |
| CO1: Evaluating the in-phase and quadrature phase component of Band pass signalling. Simulation of different coding techniques to convert symbols into waveforms.  CO2: Design receivers such as Correlation and matched filters for additive Gaussian noise  CO3: Explain different digital modulation schemes, and compare advantages/ Disadvantages of each as applied to baseband signal. Ability to simulate modulation techniques in communication systems using modern tool.  CO4: Make use of adaptive equalization techniques in band limited channels to control the Inter Symbol Interference (ISI),  CO5: Analyze and Simulate Performance of different spread spectrum techniques in communication system. |