

Course Name - Digital Communication

Faculty Name - Prof. Bikash Kumar Dey

Institute Name - IIT Bombay

Course Syllabus -

1. Introduction
2. Sampling
3. Quantization, PCM and Delta Modulation
4. Probability and Random Processes I
5. Probability and Random Processes II
6. Channels and their Models – I
7. Channels and their Models – II
8. Information Theory – I
9. Information Theory – II
10. Bandpass Signal Representation – I
11. Bandpass Signal Representation – II
12. Digital Modulation Techniques – 1
13. Digital Modulation Techniques – 2
14. Digital Modulation Techniques – 3
15. Digital Modulation Techniques – 4
16. Digital Modulation Techniques – 5
17. Digital Modulation Techniques – 6
18. Digital Modulation Techniques – 7
19. Digital Modulation Techniques – 8
20. Digital Modulation Techniques – 9
21. Digital Modulation Techniques – 10
22. Probability of Error Calculation

23. Calculation of Probability of Error – I
24. Calculation of Probability of Error – II
25. Equalizers
26. Source Coding – 1
27. Source Coding – 2
28. Source Coding – 3
29. Source Coding – 4
30. Channel Coding
31. Fundamentals of OFDM
32. Conclusion