

Data Communication - Video course

Fundamentals of Digital Communication. Communication channel, Measure of information, Encoding of source output, Shannon's Encoding algorithms, Discrete and continuous channel, Entropy, Variable length codes, Data compression, Shannon-Hartley Theorem. Baseband data transmission, Baseband pulse shaping, Inter Symbol Interface (ISI), Binary Baseband PAM, System Many signaling schemes, Equalisation, Synchronisation Scrambler and Unscrambler.

Band-pass data transmission system ASK, PSK, FSK, DPSK & PSK, MSK, Modulation schemes coherent and Non Coherent detector. Probability of Error (PE) , Performance Analysis and Comparison.

Error detection and correction codes, Linear Block Coding, Algebraic Codes, Cyclic Codes, Convolution codes, Best Error, Correcting Codes, performance of Codes. Synchronous and Asynchronous transmission, Modem, Serial interface, Circuit Switching, Packet Switching, Hybrid switching, Architecture of computer network, OSI model, Data communication protocols.



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