

CSC431: Computer Networks (2)

Difference between LANs/MANs and WANs; Transmission media; LAN/MANs topologies: Bus; Tree; Ring; Star Protocol Architecture; Logical link control (LLC); Medium access control (MAC)-LLC Services; LLC Protocols; Flow control; Error control The transport and session layers: Transport protects design issues, interconnection of packet-switching networks. The presentation layer: network security and privacy, text compression, virtual terminal protocols, file transfer protocols. Wireless and mobile networks: Propagation modes; Line of sight transmission: Impairments; Fading in wireless environment and error compensation methods. Cellular networks: Architecture; Organization; Frequency reuse; Operation; Functions; Handoff ; Power control; traffic engineering; First generation mobile networks: AMPS (FDMA) – Second generation mobile networks: GSM (TDMA), IS-95 (CDMA); Third generation mobile networks (CDMA); Wireless LANs: Requirement; Application. Mobile IP.