

FOURTH YEAR

Telecom Switching Systems	COE409
Prerequisite: COE302, and COE403	(2-2-0-0)

Basic of switching System, Telecommunication transmission, digital Transmission, Four wire circuits, FDM, TDM, PDH, SDH, PCM Transmission path & reception path, Transmission formats for 24-channel and 30-channel systems. Evolution of Switching System. Electronic Space Division: SPC, Distributed SPC, Centralized Architecture, Network-stages. Time Division Switching. Control of Switching System: Call processing function, Common Control, stored Program Control. Signaling Techniques: In channel Signaling, Common Channel Signaling, Signaling System-6 (SS6), Signaling System-7 (SS7). Traffic Engineering: Network Traffic Load and Parameters Grade of Service and Blocking Probability, Modeling switching Systems, Incoming Traffic and Service Time Characterizations, Blocking Models and Loss Estimates, Delay Systems, Traffic Measurement, Lost call System, Queuing System. Telecom Networks: Introduction, Analog Networks, Integrated Digital Networks, Integrated services Digital Networks, Cellular radio Networks, Intelligent Networks, Private Networks, Numbering, National Schemes, International Numbering, Numbering Plan for the ISDN , Public Data Networks, Charging, Routing, General, Automatic alternative routing, Numbering, Network Management, IN, VPN, B-ISDN Telecommunications Network, Management.