

Lecture code: EELT-7002

Title: Data Communication Network

Duration: 60 hours

Content:

Overview of data communication network. Communication protocols, OSI 7 layer model. TCP/IP and the internet, addressing, routing, IPv4 and IPv6. Protocols in application, transport, network and data link layers. Quality of Service models and mechanisms. Secure communication. Queue theory and Network simulator.

Bibliography:

[1] James Kurose, Keith Ross. Computer networks: A top-down approach, 6th ed., Pearson, 2013.

[2] Andrew Tanenbaum. David Wetherall, Computer Networks, 5th ed., Pearson, 2011.

[3] Douglas Comer. Internetworking with TCP/IP, v.I, 6th ed., Pearson, 2014.

[4] Douglas Comer. Computer networks and internets, 5th ed., Pearson, 2009.

[5] William Stallings. Data and Computer Communications, 10th ed., Pearson, 2014.

[6] L. Peterson, B. Davie. Computer networks: a system approach, 5th ed., Elsevier, 2012.