ECSE 316. SIGNALS AND NETWORKS.

Credits: 3

Offered by: Electrical & Computer Engr (Faculty of Engineering)

Terms offered: Fall 2025, Winter 2026

View offerings for Fall 2025 or Winter 2026 in Visual Schedule Builder.

Description

Introduction to the physical and software architecture of networks and the analysis and representation of signals; client-server and peer-to-peer architectures; layered design principles; network applications and socket programming; multimedia streaming, web transfer, and voice-over-IP; continuous-time and discrete-time signals; Fourier transforms and frequency domain analysis and representation of signals; filtering and sampling; flow and congestion control; solutions of linear constant-coefficient differential equations, transient and steady state response; Laplace transforms; addressing and routing for unicast, multicast, and broadcast transmission; wired and wireless access systems; multiple access protocols. Examples: Ethernet, http, TCP/IP, 802.11, OSPF, BGP.

- Prerequisite(s): COMP 251, ECSE 200, and MATH 263
- (3-2-4)