

ECE 227: Data and Computer Communications (3 cr.)

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Connecting computers into distributed systems. Computer networks. Local and wide area networks. Networks of workstations. Internetworking and protocols. Open systems. Programming and software issues. Distributed applications and databases.

Prerequisites: ECE 201, ECE 188

(Spring)

Textbooks:

1. F. Halsall, *Data Communications, Computer Networks, and Open Systems*, Addison-Wesley
2. W. Stallings, *Data & Computer Communications*, Prentice Hall

Contents:

1. Data communication networks and open system standards
2. Data transmission
3. Network hardware and software
4. Protocols, LANs, WANs
5. Networks of workstations (NOWs)
6. Software and load balancing in NOWs
7. Midterm examination
8. The application layer
9. Network programming
10. Open systems
11. Distributed systems
12. Distributed applications & databases
13. Software tools
14. Examples
15. Final examination