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Course CODE 416016 **Total of Course Hours** 64 **Course Credit** 3.5

Course Instruction Data Communication Networking may be the fastest growing technologies in our culture today. One of the ramifications of that growth is a dramatic increase in the number of professions where an understanding of these technologies is essential for success-and a proportionate increase in the number and types of students taking courses to learn about them.

Today students wanting to understand the concepts and mechanisms underlying telecommunications and networking come from a variety of academic and professional backgrounds. To be useful, the course on data communication and networking must be accessible to students without technical backgrounds while still providing substance comprehensive enough to challenge more experienced readers. This course is prepared for this new mix of students in mind.

Introduction Data Communication Networking Models Data and Signal
Transmission

Media Using Telephone and Cable Networks for data Transmission Data Link Control
Multiple Access Wire LANs Ethernet Connecting LANs, Backbone Networks, and virtual LANs

Wireless WANs: Cellular Telephone and Satellite Networks Network Layer Logical
Addressing Network Layer Internet Protocol Network Layer: Delivery, Forwarding, and
Routing Process-to-Process Delivery UDP TCP Domain Name System Remote Logging
Electronic Mail and File Transfer

WWW and HTTP

PRE-REQUISITES C Mathematics DSA

INDICATIVE BASIC READING LIST

Essential Reading. **Data Communication and Networking. Fourth Edition**

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