

Network Administration

3 Credit Hours

Objectives

The objective of this course is to provide a practical as well as theoretical basis for managing and administrating networks. The following topics will be covered in this course: Networking Overview, IP addressing Basics, Case Histories of Networking & Management, Organization and Information Models, Communication and Functional Models, Simple Network Management Protocol (SNMP), Remote Monitoring & Web-Based Management, Broadband Network Management, Tools, Systems and Applications, Introduction to windows XP and 2003 server, Review of File sharing, Users Accounts and groups, How DNS works, DHCP server, Managing web services using IIS, Remote Access Services, Disk Management, Overview of the Active Directory, Integrating DNS with the Active Directory, Introduction to Linux, User Administration & Disk Management, Samba server, Web Server, Firewall, An Introduction to IP Tables, Internet Traffic Management using Squid, Remote Disk Access with NFS

Prerequisites

Data Communication and Networking

Text Book

Mani Subramanian, *Network Management – Principles and Practice*, 2nd Edition

Reference Books

- Kauffels, F-J, *Network Management*, Addison Wesley, 1992
- Steven Karris, *Networks: Design and Management*, Orchard Publications, 2002.
- Teresa C. Piliouras, *Network Design: Management and Technical Perspectives*, Auerbach Publications; 2nd Edition, 2004.
- Arne Mikalsen, Per Borgeesen, *Local Area Network Management, Design & security*, John Wiley & Sons, 1st Edition, 2002.
- Ball, L.A., *Cost-Effective Network Management*, McGraw-Hill, 1992
- Stallings, W., *Network Management*, IEEE Tutorial 1993
- John Blommers, *OpenView Network Node Manager: Designing and Implementing an Enterprise Solution*
- Priscilla Oppenheimer, Joseph Bardwell, *Troubleshooting Campus Networks: Practical Analysis of Cisco and LAN Protocols*
Clare Gough, *Building Scalable Cisco Inter networks (BSCI)*.

Network Administration Lab

1 Credit Hours

Relevant to the above topics
