University of Management and Technology
School of Commerce and Accountancy
Quaid e Azam Campus

Course Outline

Course Title: Network Design and Management (CS362)	
Program	ADP(ITM)
Credits Hours	3
Duration	15 Weeks / 30 Sessions
Prerequisites	
Resource Person	
Contact/Email	

Course Description:

This course is planned to gain basic understanding of computer networks through Layered architecture.

Learning Objectives:

A better understanding of each layer of the network architecture.

Teaching-Learning Methodology:

Note: <u>Select methodologies as per nature of the course.</u>

- Lectures
- Recommended Text/Supplementary Texts
- Handouts
- Case Studies
- Skill Development Exercises
- Project Report/Term Paper
- Any other Teaching Tool………………………………………

Recommended Text Book:

1. Top-Down Network Design   3rd Edition

                                                        By: Priscilla Oppenheimer

Assessment & Evaluation:

Note: **Please Specify the Weightage you want to assign to assignments and Final Project/ Project presentation/Presentation.**

Quizzes	**15%**
Assignments	
Final Project	20%
Project Presentation/Presentations	
Mid Term	**25%**
End Term Exam	**40%**
Total:	**100**

SEHEDULE OF ACTIVITIES

Note: Please fill the tasks/activities column according to your course plan

Week	Contents/Topics to be Taught	Tasks/Activities
1	**Analyzing Business Goals and Constraints**	Course Outline Distribution
2	**Analyzing Technical Goals and Tradeoff**	
3	Characterizing the Existing Internetwork	Quiz 1
4	Characterizing Network Traffic	
5	**Designing a Network Topology**	Assignment 1
6	Designing Models for Addressing and Naming	Assignment 2
7	Selecting Switching and Routing Protocols	Quiz 2
8	**Developing Network Security Strategies**	
9-10	**Developing Network Management Strategies**	Quiz 3
11-12	Selecting Technologies and Devices for Campus Networks	
12-13	**Selecting Technologies and Devices for Enterprise Networks**	Quiz 4
14-15	**Testing Your Network Design** **Optimizing Your Network Design** **Documenting Your Network Design**	Assignment 4 Presentations (if any)
16	**END TERM EXAMINATION**	