CPIS-472 Syllabus

Catalog Description

CPIS-472 Data Networks Design and Management
Credit: 3 (Theory: 3, Lab: 0, Practical: 1)
Prerequisite: CPIS-370
Classification: Elective

The objective of this course is to explore the practical concepts and basic processes of designing and managing data networks. It addresses the technical and management aspects related to data networks design and use. It also equips the students with the technical skills required to compare and contrast between the various techniques related to data networking and the ability to develop selection criteria to choose from the available alternatives.

Class Schedule

Meet 50 minutes 3 times/week or 80 minutes 2 times/week

Lab/Tutorial 90 minutes 1 times/week

Textbook

James D. McCabe, , "Network Analysis, Architecture and Design", Morgan Kaufmann Pub; 2 edition (2003)

ISBN-13 9781558608870 **ISBN-10** 1558608877

Grade Distribution

Week	Assessment	Grade %

Topics Coverage Durations

Topics	Weeks
Determining the user and networking requirements.	2
Principles and techniques of preparing feasibility studies and the technical studies about data networks.	1
Basic concepts of data network design.	1
Hardware selection criteria.	2
Evaluation methods of the networking technologies and criteria of selecting from them.	2
Network performance mechanisms and optimizing them to improve efficiency.	2
Management of network user accounts.	2
Setting authorization permissions and resource distribution over networks.	2

Last Articulated

Relationship to Student Outcomes

a	b	c	d	e	f	g	h	i	j
	x					x		x	

Course Learning Outcomes (CLO)

By completion of the course the students should be able to

1. To be able to study, analyze and determine the network users' requirements. ()
2. To be able to prepare feasibility studies and other technical studies required to develop data networks. ()
3. To be able to compare, contrast and select from various data networking technologies. ()
4. To be able to prepare operational plans to replace data networks. ()
5. To be able to evaluate the performance of data networks and suggest solutions to improve performance. ()
6. To be familiar with network management principles, setting authorization permissions and distribute resources on networks according to the users' needs. ()

Coordinator(s)