

# Computer Networks

**Coordinator**

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# Computer Networks

Short Course Offered by:

Department of Computer Engineering  
King Fahd University of Petroleum  
and Minerals  
Dhahran, Saudi Arabia

# Course Objectives

- In this course, you will learn about
  - » OSI Layers
  - » Data Communication Basics
  - » LAN/WAN Standards
  - » Connections services and Network Connectivity
  - » Internetworking
  - » Structured Enterprise Network
  - » TCP/IP (with hands on)
  - » Network Security
  - » Microsoft Networking
  - » Network Management
  - » Internet Services
  - » And other related material

# Course Content

- Day 1
  - » OSI Layers
  - » Data Communication Basics
  - » LAN/WAN Standards
- Day 2
  - » Connections services and Network Connectivity
  - » Internetworking
  - » Structured Enterprise Network
- Day 3
  - » TCP/IP (with hands on)
  - » Network Security

# Course Content

- Day 4
  - » Microsoft Networking
  - » Network Management
- Day 5
  - » Internet Services
  - » Conclusions and Summary

# Logistics

- Refreshments
- Restaurants
- Rest rooms
- Prayer facilities
- Parking (pass provided)
- Messages/Phone
- Security
- Other items

# Computer Engineering

- » Computer Engineering (COE) is the discipline concerned with the design, analysis, modeling and implementation of **Computers and Networks systems**. Both the software and the hardware aspects of these systems are studied in a balanced and coherent manner. The COE program at KFUPM provides a comprehensive coverage of a wide range of COE subjects including hardware design, computer networks and data communications, computer architecture and operating systems, microprocessor-based systems, computer programming languages and software.

# Goals

- Graduate students in Computer Engineering.
- Provide engineers who are capable of coping with a rapidly growing computer technology.
- Conduct research activities that will enhance the country's industry, and broaden the scope and ability of faculty members.
- Provide necessary channels for transferring computer engineering technology into country.
- Adapt new and appropriate technologies for the country's need.



# COE Disciplines

- **Computer Networks** and Data Communications
- Computer Architecture and Design
- Digital Design Automation
- Computer Based Systems
- Testability and Fault Tolerance

# COE Tracks

- The new curriculum has three tracks for students to concentrate. The tracks are:
  - » Software
  - » **Computer Networks**
  - » Computer Systems

# Laboratory Facilities

- » Computer Networking and Data Communications Laboratory
- » Logic Design Laboratory
- » Microprocessors Laboratory
- » Design Automation Research Laboratory
- » Printed Circuit Boards Manufacturing Center
- » PC Laboratory
- » Computer Graphics Center
- » Digital Systems Design Laboratory
- » And Others...

# Community Services

- Seminars
- Computer Exhibition
- **Short Courses**
  - » Personal Computers
  - » **Computer Networks**
  - » Internet services and applications
  - » Mobile Networks
  - » PC Hardware and Maintenance
  - » **WWW Development**
  - » etc..

# Instructors

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