



**Indian Institute of Management Indore**  
**EXECUTIVE POST GRADUATE PROGRAM IN E-  
GOVERNANCE**

**2013-14**

**Title of the Course: IT Networking**

**Credits: 2**

**Name of the Faculty member:** Prof. Madhukar Dayal

**Email:** madhukar@iimidr.ac.in

**Academic Associate:** Ms Pragati Maheshwari, pragati@iimidr.ac.in

**Email:** madhukar@iimidr.ac.in **Telephone:** 0731-2439531, 97552 89150

**COURSE DESCRIPTION AND OBJECTIVES:**

Computer networks play an important role in the design and delivery of new products and/or services by all organizations. The computing networks technology is limited only by the users' imagination in its ability to deliver immense value to clients. It is imperative to understand how IT can be used to improve Governance, especially as the financial nature and impact of e-Governance projects is extremely large.

The objectives of this course are to:

- (a) Understand the technologies behind IT networking.
- (b) Learn ways in which these technologies have been deployed for e-Governance projects in Indian and non-Indian contexts.
- (c) Learn critical success factors and development of strategies to overcome the bottlenecks and pitfalls faced in such e-Governance projects.

**PEDAGOGY:**

An appropriate mix of lectures, cases, exercises and class discussions.

**EVALUATION:**

<u>Component</u>	<u>Weightage</u>
Class participation	<b>10%</b>
Quizzes	<b>20%</b>
Presentations / Submissions	<b>30%</b>
End Term	<b>40%</b>
Total	<b>100%</b>

**TEXT BOOK:** Hallberg, Bruce (2009). "Networking: A Beginner's Guide" (5th ed), McGraw Hill, ISBN 0071633545, 9780071633543.

Reference website: <http://compnetworking.about.com/>

## **SCHEDULE OF SESSIONS:**

### **Module 1: Computer Networking Technologies and their Applications**

#### **Module Objective(s): Familiarity with computer networking technologies**

**Sessions 1 & 2:** Local Area Networks, Ethernet, Packet-switched Networks, Wide Area Networks, The Internet

**Readings:** Chapters 1 to 6 (except Chapter 3).

**Case:** Grand Junction Networks (2007), HBS E240-PDF-ENG.

**Session 3:** Wireless Networks

**Readings:** Chapter 7.

**Case:** "Google's Android: Will it shake up the Wireless Industry in 2009 and Beyond?", HBS SM176.

**Session 4:** Client/Server, Peer-to-Peer and the WWW

**Readings:** Chapters 8 to 10, 14.

**Case:** Peer To Peer File Sharing And The Market For Digital Goods, HBS 9-706-479.

### **Module 2: Network Security and Web Technologies**

#### **Module Objective(s): Security, Disaster and Recovery**

**Session 5:** Security

**Readings:** Chapter 11.

**Case:** Nil.

**Session 6:** Disasters and Recovery

**Readings:** Chapter 12.

**Case:** Nil.

**Session 7:** Cryptography and Digital Signatures

**Readings:** Chapters 3 and 11.

**Case:** Sun Microsystems Inc, HBS 5-808-080.

### **Module 3: Commercial, Enterprise, and Advanced Applications**

#### **Module Objective(s): Commercial and Inter-Organizational Applications**

**Session 8:** Web server Technologies and Applications

**Readings:** Chapter 20, 21, and 22.

**Case:** Linked In Corp, HBS, 5-709-432.

**Session 9:** Systems that Span Multiple Entities

**Case:** The ITC eChoupal Initiative, HBS 5-604-077.

**Session 10:** Advances in Computing: Data Warehousing and Data Mining