



Sub Committee for Curriculum Development

Course Name: Information Security

(UG/PG): UG

Number of Credits: 2

Level: 2

Learning Objective(s):

To study the critical need for ensuring Information Security in Organizations.

1. To understand the basics of Information Security.
2. To know the legal, ethical and professional issues in Information Security.
3. To know the aspects of risk management.
4. To become aware of various standards in this area.
5. To know the technological aspects of Information Security.

Pedagogy:

- Class room sessions
- Case study

Pre-requisites: Basics of Networking concepts

Course Outline

Sr. No.	Topics	No. of Hours
1	INTRODUCTION History, What is Information Security?, Critical Characteristics of Information, Components of an Information System, Securing the Components, Balancing Security and Access,	5
2	SECURITY INVESTIGATION Need for Security, Business Needs, Threats, Attacks, Legal Ethical and Professional Issues.	5
3	SECURITY ANALYSIS Risk Management: Identifying and Assessing Risk, Assessing and Controlling Risk.	5
4	LOGICAL DESIGN Information Security Policy, Standards and Practices, Over view of ISO 17799 / BS 7799	5
5	PHYSICAL DESIGN Security Technology, IDS, Scanning and Analysis Tools, Access Control Devices, Physical Security.	5

6	SPECIAL TECHNIQUES	5
	Introduction to Web Security Requirements, Over view of Secure Socket Layer (SSL) and Transport Layer Security (TLS).	
	Total	30

Book Recommended:

- 1 Michael E Whitman and Herbert J Mattord, "Principles of Information Security", Vikas Publishing House, New Delhi, 2003.
2. Micki Krause, Harold F. Tipton, "Handbook of Information Security Management", Vol 1-3 CRC Press LLC, 2004.
2. Stuart Mc Clure, Joel Scrambray, George Kurtz, "Hacking Exposed", Tata McGraw-Hill, 2003.
3. Matt Bishop, "Computer Security Art and Science", Pearson/PHI, 2002.
4. Principles of Information Security, Whitman, Thomson.
5. Introduction to Cryptography, Buchmann, Springer.

Research Papers/Articles recommended for reading:

Suggested Evaluation Methods:

Parallel/Similar courses the existing curriculum:

S.No.	Name of the course	Institute where it was offered

Name of Member	Pravin Metkewar	Priti Kulkarni			
Designation	Assoc. Professor	Asst. Professor			
Org. / Inst.	SICSR	SICSR			
Signature					

Name of the Expert:

Signature:

Date: