



INFORMATION SECURITY

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Course Contents

- **General IntroductionCH 1** **Slides : 64**
 - Motivation and Overview
- **Attackers and their Attacks.....CH 2** **Slides : 102**
 - Types of Attacks
 - Viruses, Worms, Trojan Horses
- **Security BasicsCh 3** **Slides : 40**
- **Cryptography.....CH 4** **Slides : 172**
 - Various Encryption Techniques
 - DES, Triple DES
 - RSA
 - Digital Signature
- **Key Management and PKI.....CH 5** **Slides : 100**
- **Authentication and Authentication Protocols.....CH 6** **Slides : 54**
 - Kerberos
- **Securing the Internet.....CH 7** **Slides : 121**
 - IPSec,SSL/TLS
 - VPNs
 - Network Sec. Devices : Firewalls ,Intrusion Detection Systems, Honeypots
 - Wireless Security
- **Policies and ProceduresCH 8** **Slides : 49**
- **Risk and Security Management.....CH 9** **Slides : 65**



References

- Security + Guide to NETWORK SECURITY
Fundamentals
*Mark Ciampa, Second Edition, Thomson Course
Technology, 2005*
- Fundamentals of Network Security
Eric Maiwald , McGraw Hill, 2004
- Principles of Computer , Security+ and Beyond
*Wm.Arthur Conklin, Dwayne Williams , et al. ,
McGraw Hill , 2004*
- Lecture Notes ,
Prof.Mona Mursi , 2007



Security Resources

- **Proceedings of the IEEE Symposium on Security and Privacy**
- **Proceedings of the ACM Conference on Computer and Communications Security**
- **Proceedings of the Annual Computer Security Applications Conference**
- **Usenix Proceedings**
- **Proceedings of the National Information Systems Security Conference**
- **IEEE Transactions on Software Engineering**
- **Computers and Security -- North Holland Publisher**
- **IEEE Computer Journal of Computer Security**
- **ACM Journal of Computer Security**
- **Journal of Cryptology**