

CS1551.3 CYBER SECURITY

1. AIM

- To introduce the issues and methods of information security and its guidelines.

2. OBJECTIVES:

On completion of this course student shall:

- Understand high-level overview of information security principles.
- Understand different roles and responsibilities of security professionals
- Understand cryptography and information system risk management.
- Be aware of multiple security control families as well as benefits of each control family

3. SYLLABUS

Module 1:

Introduction to Information systems: Modeling business process, components, categories, Individuals in information system, Developing information systems; Information Systems: threats, Information assurance, cyber security and security risk analysis; Application security: Data Security considerations, security technology, intrusion detection access control

Module 2:

Security threats: Introduction to security threats, Network and services attack, security threats to e-commerce

Module 3:

Security Policies: Introduction, Why we need security policies, Security policy development, Email security policies, Policy review process, corporate policy, sample template of cyber security policy

Module 4:

Information security standards: Why ISO, IT ACT 2000, copyright, Patent, Intellectual property right, Cyber laws in India, Software Licensing, Semi conductor law and patent law,

4. REFERENCES

- Core: Fundamentals of Cyber security, MayankBhushan, BPB publication, First Edition 2017