



STANLEY

COLLEGE OF ENGINEERING & TECHNOLOGY FOR WOMEN
(Approved by AICTE , New Delhi | Affiliated to Osmania University ,Hyderabad)
Address : Chapel Road, Abids ,Hyderabad

CS 403

INFORMATION SECURITY

UNIT- I

Introduction: History, critical characteristics of information, NSTISSC security model, Components of an information system, Securing the components, balancing security and access, The SDLC, The security SDLC

Need for Security: Business needs, Threats, Attacks-secure software development

UNIT-II

Legal, Ethical and Professional Issues: Law and ethics in information security, relevant U.S laws- international laws and legal bodies, Ethics and information security

Risk Management: Overview, Risk Identification, risk assessment, Risk Control strategies, selecting a risk control strategy, Quantitative versus qualitative risk control practices, Risk management discussion points, recommended risk control practices

UNIT-III

Planning for Security: Security policy, Standards and practices, Security blue print, Security education, Continuity strategies.

Security Technology: Firewalls and VPNs: Physical design, firewalls, protecting remote connections.

UNIT-IV

Security Technology: Intrusion detection, Access control and other security tools: Intrusion detection and prevention systems, Scanning and analysis tools, Access control devices.

Cryptography: Foundations of cryptology, cipher methods, cryptographic Algorithms, Cryptographic tools, Protocols for secure communications, Attacks on cryptosystems

UNIT-V

Implementing Information Security: information security project management, technical topics of implementation , Non- technical aspects of implementation, Security certification and accreditation
Security and Personnel: Positioning and staffing security function, Employment policies and practices, internal control strategies.

Information security Maintenance: Security management models. The maintenance model, Digital forensics

Suggesting Reading:

1. Michael E. Whitman and Hebert J Mattord, Principles of Information Security, 4th edition Ed. Cengage Learning 2011
2. Thomas R Peltier, JustingPeltier, John Blackley, Information Security. Fundamentals, Auerbacj Publications 2010
3. Detmar W Straub, Seymor Goodman, Richard L Baskerville, Information Security. Policy proceses and practices PHI 2008
4. Marks Merkow and Jim Breithaupt, Information Security. Principle and Practices, Pearson Education, 2007

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