

Information Security



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Information Security

by:

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For Final Year B.E/B.Tech Students

(Computer Science and Engineering / Information Technology Branch)

As Per Syllabus of Anna University – Reg 2017


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Mahendra College of Engineering
Mahendra Salem Campus,

Minnampalli, SALEM 636 106
TAMIL NADU

Publisher



|| Lucknow || Moradabad || Dehradun || New Delhi ||

Published by

Vandana Publications
UG-4, Avadh Tower, Naval Kishor Road,
Hazratganj, Lucknow – 226001, INDIA

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ISBN
978-93-90728-24-4


First Published
April 2021

All disputes are subject to Lucknow jurisdiction only.

Printed at:
Vandana Publication Press
UG-17, Avadh Tower, Naval Kishor Road, Hazratganj,
Lucknow – 226001, Uttar Pradesh, INDIA.
Ph: +91-9005805403

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Syllabus for Regulation 2017 Anna University
IT2042 INFORMATION SECURITY

Unit I: Introduction (9 hours)

History - What is Information Security? – Critical characteristics of Information – NSTISSC Security Model – Components of an Information System – Securing the components – Balancing Security and Access – The SDLC – The Security SDLC.

Unit II: Security Investigation (9 hours)

Need for Security – Business needs – Threats – Attacks – Legal, Ethical and Professional Issues.

Unit III: Security Analysis (9 hours)

Risk Management: Identifying and Assessing risk, Assessing and Controlling Risk.

Unit IV: Logical Design (9 hours)

Blueprint for Security – Information Security policy – Standards and Practices – ISO17799/BS7799, NIST models – VISA International Security Model – Design of Security Architecture – Planning for Continuity.


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Unit V: Physical Design

(9 hours)

Security technology – IDS – Scanning and Analysis tools –
Cryptography – Access control devices – Physical security –
Security and Personnel.

Text Book

1. Michael E Whitman and Herbert J Mattord, Principles of Information Security, Vikas Publishing House, New Delhi, 2003.

Reference Books

1. 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 McGrawHill, 2003.
3. Matt Bishop, Computer Security Art and Science, Pearson/PHI, 2002.



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