



Bachelor of Business Administration  
 B.B.A (ITM) Semester-IV

Course Code	UM04DBBI75	Title of the Course	Information Security
Total Credits of the Course	03	Hours per Week	03

Course Objectives:	<ol style="list-style-type: none"> <li>1. An introduction to information Security..</li> <li>2. It is designed to familiarize students about Information Security Life Cycle.</li> <li>3. The technical foundation for understanding information systems.</li> <li>4. To understand different types of Security.</li> <li>5. Identify to how to protect data to user authorised use.</li> </ol>
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Course Content		
Unit	Description	Weightage*(%)
1.	<b>Information Security Basics:</b> Security Administration: Concepts and principles, Security Equation, System Life Cycle, Security development life cycle, Policies and practices, Why control access?, Authentication, Auditing. Monitoring	25%
2.	<b>Attacks:</b> DoS, Malicious Code Attacks, Password Attacks, Software Exploitation and Buffer Overflows, Spoofing, TCP/IP Hijacking, Remote Access Security, Email Security, Wireless Security, Web Security.	25%
3.	<b>Security:</b> Device based Security (Firewall (Packet. Filter, Application layer), Routers, Switches, Wireless, Workstation, Server), Media based Security (COAX (thin / thick), UTP / STP, Fiber optic, Magnetic tapes, CDR, Hard drives, FDD) Security Topologies (Security zones: DMZ, Intranet, Extranet) Intrusion Detection: Network, Host, Application based	25%
4.	<b>Cryptography:</b> Introduction, Conventional Encryption Principles, Basic terms: (Plaintext, Cipher Text, Cryptography, Cryptanalysis), Substitution Ciphers vs. Transposition Ciphers, Introduction to Public Key Cryptography, Private Key Cryptography	25%

Teaching-Learning Methodology	E-Learning consist of teaching can be based in or out of the Classrooms, the use of computers and the Internet. E-learning definition is defined as providing Training and development to the Students/Employees through
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	various Electronic media such as the Internet, audio, video etc.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / MCQ (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quiz, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Written examinations and/or quizzes;
2.	Presentations;
3.	Research assignments;
4.	Homework and/or lab assignments that demonstrate the application of appropriate Security issues.
5.	In-class interactive role-plays.
6.	User Standing Different types of Hardware use in Security.

Suggested References:	
Sr. No.	References
1.	Michael Cross, Norris L Johnson, "Security+ Study Guide", Syngress Books
2.	Debra S Isaac, Michael J Isaac, The SSCP Prep Guide, Wiley Publications





3.	Ronald L Krutz , Russell Dean Vines, The CISM Prep Guide – Mastering the five domains of Information security management, Wiley Publications
4.	Ed Tittel , Mike Chapple, James Micheal Stewart, CISSP - Certified Information Systems Security Professional Study Guide, SYBEX, 3rd. Ed.
5.	Ronald L Krutz , Russell Dean Vines, Security + Prep Guide, Wiley Publications
6.	Ronald L Krutz , Russell Dean Vines, The CISSP prep guide Gold Edition, Wiley publications
7.	Andrew S Tannenbaum: Computer Networks, 3rd Ed., Pearson-Prentice Hall
8.	B. A. Forouzan: Data Communications and Networking 2nd Ed., TMH

On-line resources to be used if available as references material:

On-line resources:

<https://www.geeksforgeeks.org/conventional-encryption/>

<http://index-of.es/Security/Syngress%20-%20Snort%202.1%20Intrusion%20Detection,%202nd%20edition.pdf>

<https://www.geeksforgeeks.org/principal-of-information-system-security-security-system-development-life-cycle/>

[https://www.techotopia.com/index.php/Network\\_Security\\_Topologies](https://www.techotopia.com/index.php/Network_Security_Topologies)

[https://access.redhat.com/documentation/en-us/red\\_hat\\_certificate\\_system/9/html/planning\\_installation\\_and\\_deployment\\_guide/introduction\\_to\\_public\\_key\\_cryptography](https://access.redhat.com/documentation/en-us/red_hat_certificate_system/9/html/planning_installation_and_deployment_guide/introduction_to_public_key_cryptography)

