

MB304.4 E-Commerce and Cyber Securities

Learning Objective :

The overall objective of this subject is to familiarize the students with e-Commerce, Java Script and Cyber Security.

- To gain a fundamental knowledge of what Cyber Security is and how it applies to your daily work
- To gain an understanding of terms commonly used in Cyber Security such as “vulnerability”
- To know how vulnerabilities occur and how to limit your exposure to them
- To gain a fundamental understanding of what an attack is, and how to identify and prevent them from occurring
- To provide the fundamental skills and understanding needed to identify Cyber Security threats

Unit I: Basics of E-Commerce:

Need of E-commerce, Elements of Electronic Business Process :- Basics of Internet and Networking; Network Economics; Commerce Paradigm; Interactions ; Transactions; Introduction to Electronic Payment System; Digital Cash, Electronic Check, On -Line Credit Card, On- Line Banking.

Unit II: Internet Basics:

What is Internet? What Special about Internet, Internet Protocols: TCP, IPv4, IPv6, FTP, HTTP, SOAP, SMTP, UD, Security Issues in E-Business, Security Overview, Electronic Commerce Threats, Encryption, Cryptography, Public Key and Private Key Cryptography, Digital Signatures, Digital Certificates, Securing E-commerce Networks: Security, Protocols such as HTTP, SSL, Firewalls, Personal Firewalls, IDS, VPNs, Public Key Infrastructure(PKI) for Security, E-Business Models,

Unit III: Futures of E-Commerce :

Cyber-Laws; Nation State in New Millennium; Entrepreneurial Opportunities; Embedded E- Commerce, Strategies for E-Commerce. Legal, Ethical and Societal Impacts of E-Commerce

Unit-IV: An Introduction to Java Script:

Statements, Comments, Variables, Operators, Functions, Loops, Objects, HTML: Basic HTML and Tags, Language Description, Usability, Static Creation of HTML Web Pages. Creating Tables, Forms and Their Advantages, An overview of XML, Use of XML, Integrity of XML with Databases.

Unit V: ASP:

ASP.Net (Active Server Pages), An Introduction to ASP.Net, Variables and Data Types, Site

Design: Creating Master Pages, Content Pages, Use of web.config file, global.asax file, Styling with Themes, Events and Code, Database Connectivity through ADO.net, Caching, Introduction of Web Services, Deployment, Builds and Finishing U, An Introduction to AJAX.

Suggested Readings:

1. Chris Hart, John Kauffman et al., Beginning ASP.NET 2.0, Wrox, Wiley India Pvt Ltd

2. Stephen Walther, ASP.NET Unleashed, Sams Publications
3. Bharat Bhaskar, Electronics Commerce, Tata McGraw-Hill
4. Ivan Bayross, Web Enabled Commercial Application Development, BPB Publications
5. James Conard, Patrick Rengler, Birn Erancis, Introduction to .net , Jay Elynn Wron Publications

Learning Outcomes:

Upon successful completion of the course, the student will be able to:

- Demonstrate an understanding of the foundations and importance of E-commerce
- Demonstrate an understanding of retailing in E-commerce by:
 - i. Analyzing branding and pricing strategies,
 - ii. Using and determining the effectiveness of market research
 - iii. Assessing the effects of disintermediation.
- Analyze the impact of E-commerce on business models and strategy
- Describe Internet trading relationships including Business to Consumer, Business-to-Business, Intra-organizational.
- Describe the infrastructure for E-commerce
- Describe the key features of Internet, Intranets and Extranets and explain how they relate to each other.
- Discuss legal issues and privacy in E-Commerce
- Assess electronic payment systems
- Recognize and discuss global E-commerce issues
- Possess a fundamental knowledge of Cyber Security
 - Understand what a vulnerability is and how to address most common vulnerabilities
- Know basic and fundamental risk management principles as it relates to Cyber Security
 - Have the knowledge needed to practice safer computing and safeguard your information
 - Understand basic technical controls in use today, such as firewalls and Intrusion Detection systems.