

# **Course – computer Network security**

## **UNIT-I**

**Introduction: Attack, Services and Mechanism, Model for Internetwork Security.**

**Cryptography: Notion of Plain Text, Encryption, Key, Cipher Text, Decryption and cryptanalysis; Public Key**

**Encryption, digital Signatures and Authentication.**

## **UNIT-II**

**Network Security:**

**Authentication Application: Kerberos, X.509, Directory Authentication Service, Pretty Good Privacy, S/Mime.**

## **UNIT-III**

**IP security Architecture: Overview, Authentication header, Encapsulating Security Pay Load combining**

**Security Associations, Key Management.**

## **UNIT-IV**

**Web Security: Requirement, Secure Sockets Layer, Transport Layer Security, and Secure Electronic Transactions.**

## **UNIT-V**

**Network Management Security: Overview of SNMP Architecutre-SMMPV1  
Communication Facility,  
SNMPV3.**

## **UNIT-VI**

**System Security: Intruders, Viruses and Related Threats, Firewall Design Principles.**  
**Comprehensive examples using available software platforms/case tools, Configuration Management.**

# **Course – Information system**

## **:analysis,design & implementation**

### **UNIT-I**

**Overview of System Analysis and Design:** Systems Development Life Cycle; concept and Models:  
requirements determination, logical design, physical design, test planning, implementation, planning and performance evaluation, communication, interviewing, presentation skills; group dynamics; risk and feasibility analysis; group based approaches, JAD, structures walkthroughs, and design and code reviews; prototyping; database design software quality metrics; application categories software package evaluation and acquisition.

### **UNIT-II**

**Information Requirement Analysis:** Process modelling with physical logical data flow diagrams, data modelling with logical entity relationship diagrams.

### **UNIT-III**

**Developing a Proposal:** Feasibility study and cost estimation.  
**System Design:** Design of input and control, design of output and control, file design/database design, process, user interface design, prototyping; software constructors; documentation.

### **UNIT-IV**

**Application Development Methodologies and CASE tools:** Information engineering,

**structured system analysis and design, and object oriented methodologies for application development**  
**data modelling, process modelling, user interface design, and prototyping, use of computer aided software engineering (CASE) tools in the analysis design and implementation of information systems.**

#### **UNIT-V**

**Design and Implementation on OO Platform: Object oriented analysis and design through object modelling technique, object modelling, dynamic modelling and functional object oriented design and object oriented programming systems for implementation, object oriented data bases.**

#### **UNIT-VI**

**Managerial issues in Software Projects: Introduction to software markets; planning of software projects, size and cost estimates; project scheduling; measurement of software quality and productivity, ISO and capability maturity models for organizational growth.**

# **Course – E-commerce**

#### **UNIT-I**

**Introduction to E-Commerce: The Scope of Electronic Commerce, Definition of Electronic Commerce, Electronic E-commerce and the Trade Cycle, Electronic Markets, Electronic Data Interchange, Internet Commerce, E-Commerce in Perspective.**  
**Business Strategy in an Electronic Age: Supply Chains, Porter's Value Chain Model, Inter Organizational Value Chains, Competitive Strategy, Porter's Model, First Mover Advantage, Sustainable Competitive**

**Advantage, Competitive Advantage using E-Commerce, Business Strategy, Introduction to Business Strategy,**  
**Strategic Implications of IT, Technology, Business Environment, Business Capability, Exiting Business**  
**Strategy, Strategy Formulation & Implementation Planning, E-Commerce Implementation, E-Commerce Evaluation.**

## **UNIT-II**

**Business-to-Business Electronic Commerce: Characteristics of B2B EC, Models of B2B EC, Procurement**

**Management Using the Buyer's Internal Marketplace, Just in Time Delivery, Other B2B Models, Auctions and**

**Services from Traditional to Internet Based EDI, Integration with Back-end Information System, The Role of**

**Software Agents for B2B EC, Electronic marketing in B2B, Solutions of B2B EC, Managerial Issues,**

**Electronic Data Interchange (EDI), EDI: The Nuts and Bolts, EDI & Business.**

## **UNIT-III**

**Internet and Extranet : Automotive Network Exchange, The Largest Extranet, Architecture of the Internet,**

**Intranet and Extranet, Intranet software, Applications of Intranets, Intranet Application Case Studies,**

**Considerations in Intranet Deployment, The Extranets, The structures of Extranets, Extranet products &**

**services, Applications of Extranets, Business Models of Extranet Applications, Managerial Issues.**

**Electronic Payment Systems : Is SET a failure, Electronic Payments & Protocols, Security Schemes in**

**Electronic payment systems, Electronic Credit card system on the Internet, Electronic Fund transfer and Debit cards on the Internet, Stored – value Cards and E- Cash, Electronic Check Systems,**

**Prospect of Electronic  
Payment Systems, Managerial Issues.**

#### **UNIT-IV**

**Public Policy: From Legal Issues to Privacy : EC- Related Legal Incidents, Legal Incidents, Ethical & Other  
Public Policy Issues, Protecting Privacy, Protecting Intellectual Property, Free speech, Internet Indecency &  
Censorship, Taxation & Encryption Policies, Other Legal Issues: Contracts, Gambling & More, Consumer &  
Seller Protection In EC.**

#### **UNIT-V**

**Infrastructure For EC : It takes more than Technology, A Network Of Networks, Internet Protocols, Web-  
Based client/ Server, Internet Security, selling on the web, Chatting on the Web,  
Multimedia delivery,  
Analyzing Web Visits, Managerial Issues.**

## **Course – knowledge Management**

**Business Intelligence and Business Decisions: Modelling Decision Process; Decision support systems; Group decision support and Groupware Technologies.**

#### **UNIT-II**

**Executive Information and support Systems: Business Expert System and AI, OLTO & OLAP; Data Warehousing; Data Marts, Data Warehouse architecture; Tools for data warehousing.**

#### **UNIT-III**

**Multi- Dimensional analysis: Data mining and knowledge discovery; Data mining and**

**Techniques; Data  
mining of Advance Databases.**

**UNIT-IV**

**Knowledge Management Systems: Concept and Structure KM systems, techniques of knowledge management  
appreciation & limitation.**

**Reference Books:**