SHAMBHUNATH INSTITUTE OF ENGINEERING & TECHNOLOGY
Department of Computer Science & Engineering (2019-20)
SUBJECT LECTURE PLAN

Faculty Name: Niraj Kumar Tiwari

Subject Name: Cyber Security   **Subject Code:** RUC601
Total Lectures: 36   **Course:** BTECH EC 3rd Yr

Unit	Name of Topic	Lect.
UNIT-I Introduction	Introduction to information systems, Types of information Systems	L-1,2
	Development of Information Systems ,Introduction to information security	L-3
	Need for Information security, Threats to Information Systems	L-4,5
	Information Assurance, Cyber Security, Security Risk Analysis	L-6,7
UNIT-II Application Security	Application security, Data Security Considerations-Backups	L-8
	Archival Storage and Disposal of Data, Security Technology-Firewall and VPNs	L-9,10
	Intrusion Detection, Access Control	L-11
	Security Threats ,Security Threats to E-Commerce	L-12,13
	Electronic Payment System, e- Cash, Credit/Debit Cards.	L-14
	Digital Signature	L-15
	Public Key Cryptography	L-16
UNIT-III Developing Secure Information Systems	Developing Secure Information Systems ,Application Development Security	L-17,18
	Information Security Governance & Risk Management	L-19
	Security Architecture & Design Security Issues in Hardware	L-20
	Data Storage & Downloadable Devices	L-21
	Physical Security of IT Assets , Access Control, CCTV	L-22
	Intrusion Detection Systems, Backup Security Measures	L-23
UNIT-IV Security Policies	Development of Policies, WWW policies	L-24
	Email Security policies, Policy Review Process-Corporate Policies-Sample Security Policies	L-25

	Publishing and Notification Requirement of the Policies.	L-26
	Evolving Technology Security Mobile, Cloud,	L-27
	Outsourcing, SCM	L-28
UNIT-V Information Security Standards	ISO, IT Act	L-29
	Copyright Act	L-30
	Patent Law, IPR	L-31
	Cyber Laws in India; IT Act 2000 Provisions	L-32
	Intellectual Property Law: Copy Right Law	L-33
	Software License, Semiconductor Law and Patent Law	L-34
	Case Study – Corporate Security	L-35,36

References:
1.Charles P. Pfleeger, Shari Lawerance Pfleeger, "Analysing Computer Security", Pearson Education India.

2. V.K.Pachghare, "Cryptography and information Security", PHI Learning Private Limited, Delhi India.

3. Sarika Gupta & Gaurav Gupta, Information Security and Cyber Laws, Khanna Publishing House
4. Anshul Kaushik, Cyber Security, Khanna Publishing House

5. Dr.Surya Prakash Tripathi, Ritendra Goyal, Praveen Kumar Shukla ,"Introduction to Information Security and Cyber Law" Willey Dreamtech Press

6. Michael E.Whitman and Herbert J Mattord "Principle of Information Security" Cengage

7. Mike Chapple and David Seidl "Cyberwarfare: Information operations in a connected world" Jones & Bartlett Learning

8. Schou, Shoemaker, "Information Assurance for the Enterprise", Tata McGraw Hill.

9. CHANDER, HARISH," Cyber Laws And It Protection ", PHI Learning Private Limited ,Delhi
10. V.K. Jain, Cryptography and Network Security, Khanna Publishing House, Delhi