EL – II Data Privacy and Security
L-T-P 3-0-0 Cr. – 3

Objective:
1. To understand the principles of Business Analytics.
2. To be familiar with the Business Analytics algorithms and their Implementation.

MODULE – I
Passwords, security questions, challenge-response, Cryptographic hash functions, Biometrics, Phishing.

MODULE – II
Web security model, Web authentication and session management, Cross-site request forgery, SQLinjection, cross-site scripting, Logic flaws in Web applications, Clickjacking.

MODULE – III
Online tracking, Symmetric encryption, Kerberos, Memory corruption attacks and defenses, Virusesand rootkits.

MODULE – IV
Spam, Attacks on TCP/IP, DNS, BGP. Denial of service, Worms and botnets, Advance Persistent, Threats, Firewall and intrusion detection, Public Key Cryptography, SSL and certificates, Anonymity networks, Side channel attacks: acoustics and reflections.

Outcome:

1. Technical knowhow of the Data Privacy and Security for real time applications.

Books Recommended:

1. Network Security (2nd edition) by Kaufman, Perlman, and Speciner -- required textbook! □ Security Engineering by Anderson
2. The Art of Intrusion by Mitnick and Simon
3. The Shellcoder's Handbook by Koziol et al.
4. Network Security Essentials by Stallings