

## **TextBooks:**

- (1). “Hack Proofing your E-commerce Site”, Ryan Russell, Mark S. Merkow, Robin Walshaw, Teri Bidwell, Michael Cross, Oliver Steudler, Kevin Ziese, L. Brent Huston, Syngress, 2001
- (2). “The Secure Online Business”, Adam Jolly, Kogan Page, 2003
- (3). “The Secure Online Business handbook e-commerce, IT functionality & business continuity”, third edition, jonathan reuvid, Kogan Page, 2003
- (4).”Security Fundamentals for E-Commerce”, Vesna Hassler, Artech House, 2001

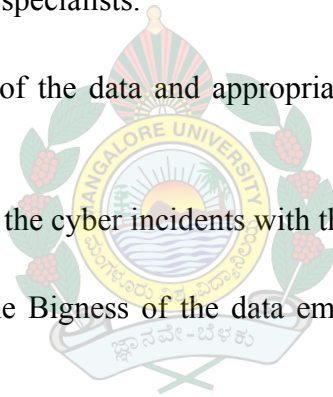
## **CSCS 508 : Big Data Analytics in Cybersecurity**

**CO1 :** To understand the enormity of the data which comes and gets accumulated which fall under the purview of cybersecurity specialists.

**CO2:** To understand the Bigness of the data and appropriately choose the methodologies and tools required for the analysis.

**CO3:** To be competent in handling the cyber incidents with the aid of Big data analytics.

**CO4:** To be able to understand the Bigness of the data emanating in an IoT environment and according



### **UNIT I**

**Applying Big data into different Cybersecurity aspects :** The Power of Big Data in Cybersecurity, Big Data for Network Forensics, Dynamic Analytics-Driven Assessment of Vulnerabilities and Exploitation, Root Cause Analysis for Cybersecurity, Data Visualization for Cybersecurity, Cybersecurity Training. **(12 hours )**

### **UNIT II**

**Machine Unlearning:** Repairing Learning Models in Adversarial Environments, **Big data in emerging cybersecurity domains :** Big Data Analytics for Mobile App Security, Security, Privacy, and Trust in Cloud Computing, Cybersecurity in Internet of Things (IoT), Big Data Analytics for Security in Fog Computing . **(12 hours )**

### UNIT III

Analyzing Deviant Socio-Technical Behaviors Using Social Network Analysis and Cyber Forensics-Based Methodologies, **Tools and Datasets for Cybersecurity** : Security Tools, Data and Research Initiatives for Cybersecurity Analysis. **(12 hours )**

#### **TextBooks:**

- (1). “Big Data Analytics in Cybersecurity”, Onur Savas, Julia Deng, CRC Press, 2017
- (2). “Data Analytics and Decision Support for Cybersecurity”, Iván Palomares Carrascosa, Harsha Kumara Kalutarage, Yan Huang, Springer, 2017
- (3). “Darkweb Cyber Threat Intelligence Mining”, John Robertson, Ahmad Diab, Ericsson Marin, Eric Nunes, Vivin Paliath, Jana Shakarian, Paulo Shakarian, Cambridge University Press, 2017
- (4). “Data Analysis for Network Cyber-Security”, Niall Adams, Nicholas Heard, Imperial College Press, 2014

#### **CSCO 512 : Strategic Governance of Cybersecurity Risks and Control Mechanisms II**

**CO1** : To make students aware of the strategic governance of the ICT resources in a business entity or corporate house or government establishment, to thwart the cyberattack and data leakage.

**CO2:** To make competent in risk assessment and analysis in case of a cyberattack

**CO3:** To make students aware of the frameworks and policies governing the data privacy in different domains and the need to be compliant with them.

**CO4:** To make the students aware of the different security control mechanisms available and how they can be implemented and assessed.

### UNIT I

**Risk Management and Prioritization Using a Control Perspective** : Ensuring that Risk Management Process Supports the Organization, Five Elements of the Risk Management Process, **Control Formulation and Implementation Process** : The Control Formulation Process, Creating and Documenting Control Objectives