CSCS 507 : APPLICATION SECURITY

Course Objective:

The objective of the courses to
1) To understand basic concepts of Cyber security.
2) To Understand the fundamental concepts of OWASP.

UNIT I

Secure Web Site Design: Choosing a Web Server, The Basics of Secure Site Design, Guidelines for Java, JavaScript, and Active X**,** Designing and Implementing Security Policies. **Introduction to OWASP** **(12 hours)**

UNIT II

Implementing a Secure E-Commerce Web Site: Implementing Security Zones, Understanding Firewalls, Implementing Intrusion Detection, Managing and Monitoring the Systems, Pros and Cons of Outsourcing Your Site, **Securing Financial Transactions:** Understanding Internet-Based Payment Card Systems, Options in Commercial Payment Solutions, Examining E-Commerce Cryptography. **(12 hours)**

UNIT III

Handling Large Volumes of Network Traffic : Determining the Load on Your Site, Managing Bandwidth Needs, Introduction to Load Balancing. **(12 hours)**

Course Outcome:

At the end of the course student will be able to
1) Learn fundamentals of OWASP and E-commerce website security.
2) Learns basic on handling large volume network traffic.

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, jonathanreuvid, Kogan Page, 2003
(4). "Security Fundamentals for E-Commerce", VesnaHassler, Artech House, 2001

CSCS 508 : BIG DATA ANALYTICS

Course Objective:

The objective of the courses to
1) Introduction to big data and exploring the big data analytics and techniques.
2) Exploring tool and databases for cyber security.

UNIT I

Applying Big data into different Cyber Security 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