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Course Title: Web Application I.T. Security

**Duration:** Three (3) Days

Class Schedule: 9:00am to 5:00pm

**Total Hours:** 21 Hours

Target Participants: Government and Private I.T. Personnel, Members of the

Academe and College Graduates of Computer Science and I.T.

related courses.

**Course Pre-requisite:** The course requires an understanding of operating systems,

networking protocols, and a basic understanding of

programming languages.

**Course Description:** The course covers principles of computer systems and website

application security. We will discuss various attack techniques and how to defend against them. Topics include hacking attacks and defenses, operating system holes, web security, social engineering attacks, data privacy act of 2012, and cybercrime act of 2012. Course projects will focus on breaking website applications, computer system, and understanding

attacks.

**Course Goals:** By the completion of this course, the students will learn the

important concepts and principles applied to information

security.

## **Teaching Methods & Strategies:**

- Lecture-Demonstration
- Group Work
- Online Discussion
- Lab Activities

## **Required Materials:**

- Machines with KALI LINUX Operating System
- Windows 7 Ultimate SP1 (Student's target machine)

## **Course Contents:**

- > Introduction to Ethical Hacking
- > Footprinting and Reconnaissance
- Network Scanning
- System Hacking
- > OWASP Top 10
- Website Hacking
- Different Hacking Techniques
- Different Hacking Tools
- Bug Bounty Hunting
- Capture The Flag
- > Data Privacy and Cybercrime Act of 2012

## **Reading Materials:**

"Penetration Testing: A Hands-On Introduction to Hacking" by Georgia Weidman "The Basics of Hacking and Penetration Testing" by Patrick Engebretson