

# Web Application Hacking and Penetration

## Testing (CS103)

40 Hours

### Outline

This intensive hands-on course will teach you how to find those vulnerabilities in your web applications before the bad guys do. The course will introduce the various methods, tools and techniques used by attackers, in order to know how to test for the major security vulnerabilities and how to identify security bugs on real systems, by using live hacking demonstrations and hands-on labs. This course provides intensive hands-on labs using real world applications.

### Objectives

The objectives of the course are to teach developers and security professionals about the most dangerous vulnerabilities and how to perform security testing, and by that increasing the amount and quality of test cases that can be performed by the auditor.

### Target Audience

Members of the software development team:

- Security Professionals
- Software experts
- Experienced developers

### Prerequisites

Before attending this course, students should be familiar with:

- Operating systems concepts
- Basic knowledge in databases & SQL language
- Programming concepts, with emphasis on web applications (HTML/JS)

# Contents

## Day 1

- Information Gathering
- Injections and Validations

## Day 2

- Authentication Vulnerabilities
- Authorization Vulnerabilities
- Business Logic Vulnerabilities

## Day 3

- SQL Injection Vulnerabilities
- File Handling Attacks

## Day 4

- Cross Site Scripting (XSS) Vulnerabilities
- Browser Manipulation Techniques

## Day 5

- Cryptography Pitfalls
- Application Denial of Service (DoS) Vulnerabilities
- Attacking Client Side Applications