



course : Fundamentals of Secure Software Development Training

City :	Dubai	Hotel :	Atlantis The Palm
Start Date :	2025-11-24	End Date :	2025-11-28
Period :	1 Week	Price :	3950 \$

HighPoint Training and Management Consultancy
هاي بوينت للتدريب والاستشارات الإدارية

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Course Overview

In today's digital landscape, software vulnerabilities can have significant impacts on business operations, reputation, and security. Secure software development is essential to protect applications from potential threats and ensure the confidentiality, integrity, and availability of data.

This Fundamentals of Secure Software Development training course provides participants with essential knowledge and practical skills to design, develop, and maintain secure applications. It combines theoretical concepts with hands-on exercises to help participants understand secure coding practices, threat modeling, vulnerability management, and compliance requirements.

Course Objectives

By the end of this course, participants will be able to:

- Understand secure software development principles and lifecycle
- Identify and mitigate common software vulnerabilities
- Apply secure coding practices in different programming environments
- Conduct threat modeling and risk assessment for applications
- Implement security testing and vulnerability scanning techniques
- Integrate security into software design, development, and deployment
- Ensure compliance with industry standards and best practices
- Enhance application resilience against cyber threats

Target Audience

This course is ideal for:

- Software Developers and Engineers
- Application Architects
- DevOps Engineers
- QA and Test Engineers
- IT Security Professionals
- Project Managers involved in software development
- Technical Leads and Team Supervisors responsible for secure coding practices

Methodology

The course uses a combination of interactive lectures, real-world case studies, hands-on coding exercises, group discussions, and scenario-based labs. Participants will engage in practical exercises to apply secure development techniques and perform vulnerability assessments in a controlled environment.

Course Outline

Day 1 – Introduction to Secure Software Development
Principles of secure software development
Software Development Life Cycle (SDLC) and security integration
Common software vulnerabilities and threats
Security standards and regulatory requirements
Day 2 – Threat Modeling and Risk Assessment
Identifying potential threats and attack vectors
Conducting risk assessments for software projects
Threat modeling techniques and frameworks
Hands-on exercise: creating threat models for sample applications
Day 3 – Secure Coding Practices
Secure coding guidelines and best practices
Input validation, output encoding, and authentication
Managing sensitive data securely
Preventing common vulnerabilities (e.g., SQL Injection, XSS, CSRF)
Day 4 – Security Testing and Vulnerability Management
Static and dynamic code analysis
Penetration testing and vulnerability scanning
Integrating automated security tools in DevOps pipelines
Hands-on lab: identifying and fixing vulnerabilities in sample code
Day 5 – Deployment, Compliance, and Continuous Improvement
Secure deployment and configuration management
Monitoring and maintaining application security
Compliance with industry standards (OWASP, ISO, NIST)
Continuous security improvement and incident response
Final workshop: securing a full software development project

Certificates

On successful completion of this training course, HighPoint Certificate will be awarded to the delegates.
Continuing Professional Education credits (CPE): In accordance with the standards of the National Registry of CPE Sponsors, one CPE credit is granted per 50 minutes of attendance.