MAWA EVENTS

Address: No. 857, Block A2. Leisure Commerce Square - No 9., 46150 Petaling Jaya, Selangor, Malaysia

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APPLICATION SECURITY AUDIT: EXAMINES THE SECURITY OF SOFTWARE APPLICATIONS TO IDENTIFY VULNERABILITIES AND WEAKNESSES

""Identifying Vulnerabilities and Strengthening Software Application Security""

Schedule

Date	Venue	Fees (Face-to-Face)
13 – 17 Apr 2026	London, UK	USD 3495 per delegate

► **Available delivery methods:** Face-to-Face & Online Training

Introduction

In today's digital landscape, securing software applications from vulnerabilities and cyber threats is critical to protecting sensitive data and maintaining trust. This 5-day course focuses on the methods and best practices for conducting comprehensive security audits of software applications. Participants will learn how to identify and assess security weaknesses, apply testing techniques to uncover vulnerabilities, and implement measures to strengthen application security.

Through a combination of theoretical insights and practical exercises, participants will gain the skills required to conduct application security audits effectively, ensuring that applications are resilient against various types of security threats.

Objectives

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

- Understand the principles and importance of application security audits.
- Identify common vulnerabilities in web and mobile applications using various testing methods.
- Conduct static and dynamic analysis to detect security flaws.
- Assess the security posture of an application through manual and automated testing.
- Implement best practices for securing software applications throughout their development lifecycle.
- Provide actionable recommendations to strengthen application security and mitigate risks.

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Why Attend

- Learn how to conduct comprehensive security audits for applications and detect vulnerabilities.
- Gain hands-on experience in applying various security testing techniques and tools.
- Improve your ability to identify and mitigate risks in software applications.
- Understand the security best practices for developing and maintaining secure applications.
- Enhance your skills in reporting security findings and providing recommendations to improve application security.
- Stay ahead of evolving cybersecurity threats and ensure robust protection for applications.

Target Audience

This program is designed for:

- IT security professionals and auditors
- Application developers and security architects
- Penetration testers and vulnerability assessors
- Compliance officers and risk management professionals
- Anyone involved in securing software applications and systems from cyber threats

Individual Benefits

- Advanced skills in identifying, assessing, and mitigating application vulnerabilities.
- Expertise in using static and dynamic analysis tools for security testing.
- Proficiency in performing application security audits using industry-standard techniques.
- Enhanced ability to provide actionable recommendations for strengthening application security.
- Greater knowledge of application security best practices and regulatory requirements.

Organizational Benefits

Upon completing the training course, participants will demonstrate:

- Improved application security posture through effective vulnerability detection and risk management.
- Increased ability to prevent, detect, and respond to security incidents within software applications.
- A stronger security culture, reducing the likelihood of cyber-attacks and breaches.
- More efficient audit processes, leading to faster identification of vulnerabilities and quicker remediation.
- Enhanced organizational compliance with security regulations and standards.

Instructional Methodology

The course follows a blended learning approach combining theory with practice:

- Strategy Briefings – In-depth presentations on application security principles, audit methodologies, and best practices.
- Case Studies – Real-world examples of application vulnerabilities, cyber-attacks, and lessons learned from security breaches.
- Workshops – Hands-on sessions using tools and techniques for conducting application security audits.
- Peer Exchange – Group discussions and shared experiences on security challenges in application development.
- Tools – Practical tools and resources for identifying vulnerabilities and securing applications.

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Course Outline

Training Hours: 7:30 AM – 3:30 PM Daily Format: 3–4 Learning Modules | Coffee breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 – 02:00

Day 1: Introduction to Application Security and Auditing

- Module 1: Overview of Application Security (07:30 – 09:30)
- The importance of application security and common threats
- Key concepts in software security and secure development lifecycle
- Security auditing vs. penetration testing
- Module 2: Common Vulnerabilities in Applications (09:45 – 11:15)
- Overview of OWASP Top 10 vulnerabilities (e.g., SQL injection, cross-site scripting)
- Understanding application attack surfaces and vectors
- Techniques for identifying vulnerabilities in web and mobile applications
- Module 3: Security Auditing Tools and Techniques (11:30 – 01:00)
- Tools for static and dynamic analysis of applications
- Introduction to security scanning and testing tools (e.g., Burp Suite, OWASP ZAP, Fortify)
- Best practices for using automated tools and manual testing for vulnerability detection

Day 2: Static Analysis and Manual Code Review

- Module 1: Static Analysis Techniques (07:30 – 09:30)
- The role of static analysis in detecting vulnerabilities in source code
- Manual code review vs. automated code scanning
- Techniques for reviewing source code to identify security flaws
- Module 2: Secure Coding Practices (09:45 – 11:15)
- Key secure coding practices to avoid vulnerabilities
- Common coding mistakes that lead to security vulnerabilities
- Writing secure code for web and mobile applications
- Module 3: Conducting a Manual Security Audit (11:30 – 01:00)
- Step-by-step process for conducting a manual application security audit
- Techniques for reviewing application architecture and design for security flaws
- Identifying common misconfigurations and weak spots

Day 3: Dynamic Analysis and Penetration Testing

- Module 1: Dynamic Application Testing (07:30 – 09:30)
- The role of dynamic testing in identifying runtime vulnerabilities
- Techniques for testing running applications for security flaws
- Tools and methods for conducting dynamic application security testing
- Module 2: Penetration Testing Methodology (09:45 – 11:15)
- Introduction to penetration testing and its role in application security auditing
- Phases of penetration testing: reconnaissance, scanning, exploitation, reporting
- Tools for penetration testing (e.g., Metasploit, Wireshark, Burp Suite)
- Module 3: Identifying Vulnerabilities and Exploiting Weaknesses (11:30 – 01:00)
- Techniques for exploiting vulnerabilities found during dynamic analysis and penetration testing
- Real-world penetration testing scenarios in web and mobile applications
- Ethical hacking and the legal considerations for penetration testing

Day 4: Advanced Application Security Auditing

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Module 1: Advanced Security Auditing Techniques (07:30 – 09:30)

- Advanced techniques for finding hidden vulnerabilities and zero-day exploits
- Testing for authentication and authorization flaws
- Assessing third-party libraries and APIs for security issues
- Module 2: Security Audits in the Development Lifecycle (09:45 – 11:15)
- Integrating security audits into the software development lifecycle (SDLC)
- Continuous integration and automated security testing
- Managing security audits for Agile, DevOps, and continuous deployment environments
- Module 3: Post-Audit Reporting and Mitigation (11:30 – 01:00)
- Best practices for documenting security audit findings
- Reporting vulnerabilities and providing mitigation recommendations
- Working with developers and management to fix vulnerabilities

Day 5: Actionable Steps and Certification Review

- Module 1: Security Remediation and Mitigation (07:30 – 09:30)
- Techniques for remediating vulnerabilities found during the audit
- Security patching strategies and applying security fixes to applications
- Best practices for securing applications after vulnerabilities are identified
- Module 2: Action Plan for Strengthening Application Security (09:45 – 11:15)
- Developing an action plan for continuous improvement of application security
- Building a culture of security within the development team
- Ongoing application security monitoring and updates
- Module 3: Certification Review and Final Q&A (11:30 – 01:00)
- Review of key concepts and techniques learned throughout the course
- Preparing for the certification exam and final Q&A session

Certification

Upon completing the training course, participants will receive a Certificate of Completion in Application Security Audit, recognizing their ability to conduct comprehensive application security audits, identify vulnerabilities, and implement effective security measures to protect software applications from cyber threats.

Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
- **Industry-Leading Faculty:** Courses delivered by seasoned professionals with hands-on experience.
- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation’s unique goals.

In-House / Customized Training Interested in running this course for your team? Please contact us:	TEL: **+601116373203**	EMAIL: **info@mawaevents.net**