ThriveDX Web Application Penetration Testing-TDXCS-4

Time Commitment	Skill Level	Format	Course Category
40 hours	Intermediate	Live Online, Instructor-Led,	Penetration Testing

This course offers an in-depth exploration of the most prominent aspects of web security. Participants will gain a thorough understanding of foundational concepts, advanced techniques, and real-world applications in ethical hacking and web penetration testing. Each module instills theoretical knowledge while cultivating the practical skills needed to identify and mitigate complex web application security vulnerabilities.

Who Should Attend:

- Cybersecurity professionals
- Ethical hackers
- IT professionals interested in web security
- Web developers seeking security insights

Relevant For The Following Work Paths:

- Penetration & Vulnerability Tester
- Cybersecurity Consultant

Prerequisites:

- Basic understanding of web technologies
- Familiarity with programming concepts, with a focus on JavaScript
- Knowledge of networking fundamentals
- Understanding of cybersecurity basics

Upon completion, participants will emerge with:

- Develop a Well-Rounded Skill Set: The course covers a wide range of topics, ensuring participants are fully equipped to tackle real-world cyber threats.
- Utilize Relevant Tools and Techniques: The inclusion of tools like Burp Suite, OWASP Zap, and Nessus keeps the training relevant to current industry practices.
- Practice Real-World Scenarios: The curriculum includes practical challenges and scenarios, providing insights into real-world applications of penetration testing.
- Improve Security Measures: Skills acquired in this course can significantly contribute to an organization's risk management and security strategies.
- Prepare for Evolving Threats: The course keeps professionals updated with the latest vulnerabilities and defense strategies, preparing them for evolving cyber threats.

Program Structure

Module 1

Web Fundamentals & Assessment Methodologies

- Web Technologies Overview
- Browser Tools & Debugging
- OWASP Top10
- Web Application Assessment Methodologies
- The Penetration Tester's Toolkit

Module 2

Interception Proxies & SSL Configurations

- HTTP vs. HTTPS
- AJAX
- SSL vs. TLS
- Cipher Suites
- OpenSSL – CA vs. Self-Signed Certificates
- HTTP Cookies
- Burp Suite
- OWASP Zap
- Proxying SSL Through BurpSuite

Module 3

Traffic Manipulation & Reconnaissance

- Web Site Enumeration
- Web Application Brute-Force Challenge
- DNS Reconnaissance
- Virtual Host Discovery
- Open-Source Intelligence (OSINT)

Module 4

Client-Side Attacks & XSS

- Cross-Site Scripting (XSS)
- Reflected XSS
- Stored XSS
- Document Object Model (DOM)
- DOM XSS

Module 5

Advanced Injection Attacks

- SQL Injection (including Blind and Error-based)
- Error-Based SQL Injection
- Union-Based SQL Injection
- Command Injection
- Directory Traversal
- SQL Injection Tools: sqlmap

Module 6

XML, JSON, & API Attacks

- XML Usage in Web Applications
- XXE
- SSRF
- SSRF through XXE
- XML and JSON
- REST and SOAP
- API Attacks

Module 7

Authentication, Authorization, & CSRF

- CSRF
- Broken Authentication
- Broken Authorization
- Session Attacks

Module 8

Advanced Techniques & Tools

- PHP Vulnerabilities
- LFI/RFI & Directory Traversal
- File Upload (PHP Shells, Nessus, Qualys)
- Python for Web App Penetration Testing
- WordPress Hacking (Content Management Systems, WPScan)
- ExploitDB

Module 9

Business of Penetration Testing

- Preparation
- Post Assessment and Reporting
- Writing Reports
- Nessus
- Qualys

Certification Readiness

All participants completing the course will receive a ThriveDX Course Completion Certification. Participants completing the final accreditation exam will receive a **ThriveDX Web Application Penetration Tester certification.**

This course also aligns with the knowledge expected for the following certifications:
- GIAC Web Application Penetration Tester (GWAPT)
- eLearnSecurity Web Application Penetration Tester (eWPT)
- OffSec Web Assessor (OSWA)

Note: The external certification subjects may change based on the certification provider and additional study and research may be necessary to meet certification requirements.
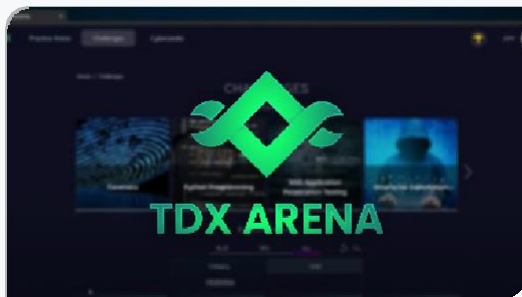
Embedded Labs and Challenges

The course includes our state-of-the-art proprietary cloud-based digital education platform, **TDX Arena**, in which real-life scenarios and advanced tech teaching meet in a gamified environment.