



Leading Effective Vulnerability Management Programs (SEC-516)

- 5 Days
- Lecture and Hands-on Labs

Course Overview

This course explores vulnerability management in cloud and DevOps environments, emphasizing proactive security through DevSecOps. Participants learn to use static, dynamic, and interactive testing tools within CI/CD workflows. The course covers securing apps, APIs, and cloud configs, along with cybersecurity leadership, incident management, and communicating risks across teams for better organizational security.

Review this course online at <https://www.alta3.com/courses/leading-vm>

Who Should Attend

- Security Managers
- DevOps/DevSecOps Engineers
- IT Security Analysts
- Cloud Infrastructure Leaders

What You'll Learn

- Understand cloud infrastructure and DevSecOps security practices
- Manage vulnerabilities using risk-based approaches and CI/CD integration
- Apply DAST and SAST for application, API, and database security
- Develop leadership and communication skills in cybersecurity operations

Outline

Day 01 - Foundations of Vulnerability Management



- Lecture: Course Overview

What is Vulnerability Management













- Lecture: aaS
- Lecture: Assets
- Lecture: Cloud Assets
- Lecture + Lab: Assets
- Lecture: Grouping Assets
- Lecture: Scope
- Lecture + Lab: Configuration Management Database

-  Lecture: Improving Current Vulnerability Management
-  Lecture: Stakeholders
-  Lecture: Requirements
-  Lecture: Permissions




What Business Are You in

-  Lecture: Mission Vision
-  Lecture: History










Day 02 - Vulnerability Identification and Assessment

-  Lecture: What are Vulnerabilities
-  Lecture: Vulnerability Management Life Cycle
-  Lecture: Identifying Threats
-  Lecture: Scanning and IP Mapping
-  Lecture: Cloud Vulnerability
-  Lecture: Tools
-  Lecture: Threat Intel Feeds
-  Lecture: Bug Bounties
-  Lecture + Lab: Bug Bounties and VDPs
-  Lecture: Penetration Testing
-  Lecture: Communication of Impact
-  Lecture + Lab: NMAP a Vulnerable System

Day 03 - Contextualization, Reporting, and Remediation






-  Lecture: Trusting Results
-  Lecture: Communication of Threats
-  Lecture: Risk Based Vulnerabilities
-  Lecture: Continual Reporting
-  Lecture: Metrics
-  Lecture + Lab: Creating Reports with Excel
-  Lecture + Lab: Creating Reports with Python Code
-  Lecture: What is Patching
-  Lecture: Image Management
-  Lecture: DevOps and DevSecOps
-  Lecture + Lab: DevOps
-  Lecture + Lab: DevSecOps

Day 04 - Integrating Vulnerability Management

-  Lecture: DevOps in Practice
-  Lecture + Lab: Idempotent Ansible
-  Lecture: Many Levers One Goal
-  Lecture: Organizational Buy in for Change Management
-  Lecture: Maintenance
-  Lecture: Alternate Strategies
-  Lecture: Communication Strategies
-  Lecture: Meeting Strategies
-  Lecture: Integration of Vulnerability Management

Day 05 - Building and Leading VM Teams

-  Lecture: Leadership

-  Lecture: Effective Leaders
-  Lecture: Vulnerability Management Best Practices
-  Lecture: Building a Team
-  Lecture: Maintain Relevance
-  Lecture: Enabling and Shaping Organizational Culture

Next Courses

- Leading Effective Security Operations Centers (SEC-551)
- Security Leadership: Strategy, Policy & Planning (SEC-514)