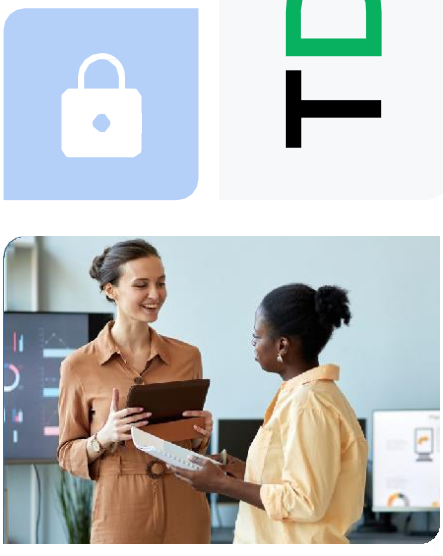
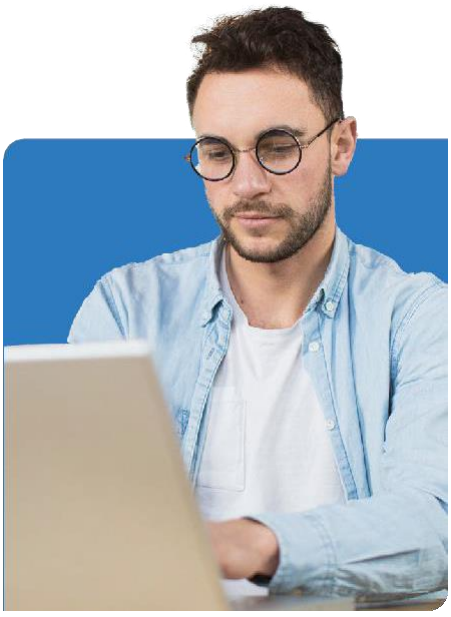
ThriveDX™

DevSecOps Specialist

TDXAD-105





ThriveDX DevSecOps Specialist

Time Commitment
5 days (total of 40 hours / 8 hours per day)

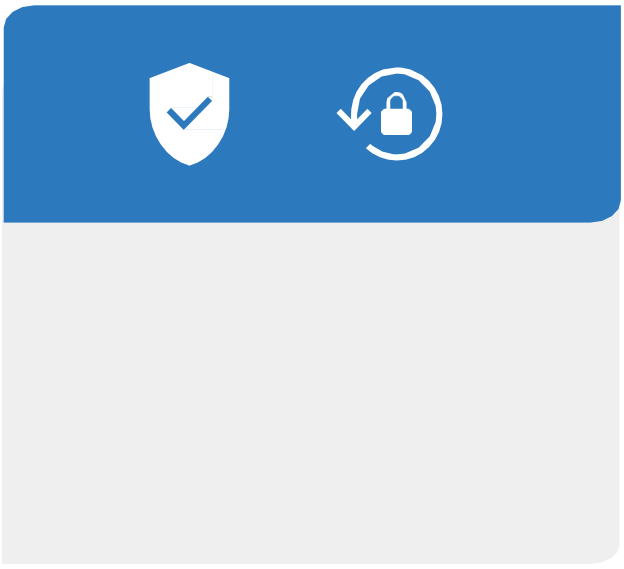
Skill Level
Professional Level

Course Category
Agile & Devops

In this course, you will learn the world of DevOps and Security Operations. We will understand how the SDLC and CI CD Pipelines work. How to work using containers and orchestrations.
- We will understand the challenges of maintaining a steady DevOps Pipeline.
- We will learn the DevOps Modern pipeline of today.-Will learn the vulnerabilities and issues of securing the DevOps Pipeline.

Target audience

- DevOps Teams
- DevSecOps Teams
- QA Teams
- Dev Teams
- Network Specialists
- System Administrators
- Cyber Analysts in Code Analyzation



Prerequisites

- Basic Development Knowledge
- Working in a Development Environment
- Basic Security Understanding
- Understand concepts and guidelines of the DevSecOps world

Objectives

- On completing this course, delegates will be able to:
- Understand and Manage DevOps and DevSecOps Lifecycle operations
- Understand and Manage Secure Development Architecture

Skills Learned:

- Understand how DevOps works and identify keys to success
- Wire security scanning into automated CI/CD pipelines and workflows
- Build continuous monitoring feedback loops from production to engineering.
- Use SAST and DAST tools in Dev Environment.
- Automate configuration management using Infrastructure as Code (IaC)
- Secure container technologies (such as Docker and Kubernetes)
- Use native cloud security services and third-party tools to secure systems andapplications
- Securely manage secrets for Continuous Integration servers and applications
- Integrate cloud logging and metrics
- Perform continuous compliance and security policy scanning

Hands on Training:

- Install a container environment
- Understand the concepts of virtualization – Hypervisor 2
- OpenShift Sandbox platform

- Cloud Platform training
- CICD Simulation Platform Labs
- GitHub Cloud Organization
- Visual Studio Labs and Environments
- Practice Labs

Program Structure

Module 1: What is DevOps - Intro

- What is Code Development
- DevOps Architectures
- Installing a Source Control Solution
- DevOps Pipeline Overview

Module 2: Working with GitHub + Bitbucket

- Working with GitHub Cloud solutions
- Understanding GIT
- Bit Bucket Integrations + Snyk

Module 3: Containers + Kubernetes

- Working with Docker
- Understanding container architecture
- Kubernetes deployment

Module 4: OpenShift Review

- What is OpenShift?
- OpenShift Sandbox Lab
- Role Permissions in OpenShift
- Network Security in OpenShift – Bitbucket YAML

Module 5: DevOps in The AWS Cloud

- What is DevOps in the cloud?
- Deploy EKS in AWS
- Scaling DevOps using Lambda
- Pipelines in the Cloud

Module 6: Secure CI CD Application Development

- How to use Arti factories
- Code Review - SAST
- Code Review - DAST
- SCA Pipeline using – Jfrog XRAY

Module 7: API Security and Architecture

- Understanding REST API
- Swagger – Postman training
- Performing PT on API Schema in Cloud

Module 8: Run Time Container Security

- OpenShift Security Architecture
- Managing Open-Source Images
- CI CD Security Gates in Development
- Aqua and SonarQube Demos

Module 9: DevOps Automation Pipelines

- What is Jenkins?
- What are Git Actions?
- GIT In the Cloud
- Code Security Architecture
- Automated SAST Pull Request Functions

Module 10: DevOps Mobile Security

- How to perform analyzation and automation
- Using Android Studio and Shift Left concepts
- Mobile Development Pipeline in GitHub

The ThriveDX Advantage

1 Handcrafted Training Programs

2 State-Of-The-Art Learning Materials

3 Israel's Premier Training Center

4 Fueled by Industry Leading Experts

5 Over 20 Years of Proven IT Education Success