

## TRAINING GOALS:

The DevSecOps Practitioner course is intended as a follow-on to the DevSecOps Foundation course. The course builds on previous understanding to dive into the technical implementation. Each section highlights useful metrics as well as integrating new techniques into differing practices. These modules offer suggestions on how to overcome people, process, and technological issues to develop better DevSecOps outcomes. Beginning with a deeper dive into the surrounding concepts, the course then considers either using existing metrics or developing unique expressions suitable to each DevOps experience. The middle section looks at architecture transitions, building an infrastructure, and tuning the CI/CD pipeline to best effect. Finally, the course offers ways to get the best from your experimentation practices and considers where the future of DevSecOps may lead.

The DevSecOps Practitioner course introduces more advanced ways to explore DevSecOps in your organization. Each section covers practical maturity guides, and then discusses how people, process and technology can be combined to improve outcomes.

The course aims to equip participants with the practices, methods, and tools to engage people across the organization involved in reliability through the use of real-life scenarios and case stories. Upon completion of the course, participants will have tangible takeaways to leverage when back in the office such as implementing DevSecOps practices to their organizational structure, building better pipelines in distributed systems, and having a common technological language.

The course is developed by leveraging key DevSecOps sources, engaging with thought-leaders in the space and working with organizations to extract real-life best practices and has been designed to teach the key principles & practices necessary for successful DevSecOps practices.

This course positions learners to successfully complete the DevSecOps Practitioner certification exam. Please note: It is highly recommended that learners complete the DevOps Institute DevSecOps Foundation course and certification prior to taking the DevSecOps Practitioner course and exam.

## COURSE OBJECTIVES

At the end of the course, the following learning objectives are expected to be achieved:

- Comprehend the underlying principles of DevSecOps
- Distinguish between the technical elements used across DevSecOps practices
- Demonstrate how practical maturity concepts can be extended across multiple areas.
- Implement metric-based assessments tied to your organization.

- Recognize modern architectural concepts including microservice to monolith transitions.
- Recognize the various languages and tools used to communicate architectural concepts.
- Contrast the options used to build a DevSecOps infrastructure through Platform as a Service, Server-less construction, and event-driven mediums
- Prepare hiring practices to recognize and understand the individual knowledge, skills, and abilities required for mature Dev.
- Identify the various technical requirements tied to the DevSecOps pipelines and how those impact people and process choices.
- Review various approaches to securing data repositories and pipelines.
- Analyze how monitoring and observability practices contribute to valuable outcomes.
- Comprehend how to implement monitoring at key points to contribute to actionable analysis.
- Evaluate how different experimental structures contribute to the 3rd Way.
- Identify future trends that may affect DevSecOps

## AUDIENCE

The target audience for the DevSecOps Practitioner course are professionals including:

- Anyone focused on implementing or improving DevSecOps practices in their organization
- Anyone interested in modern IT leadership and organizational change approaches
- Business Managers
- Business Stakeholders
- Change Agents
- Consultants
- DevOps Practitioners
- IT Directors
- IT Managers
- IT Team Leaders
- Product Owners
- Scrum Masters
- Software Engineers
- Site Reliability Engineers
- System Integrators
- Tool Providers

## CONSPECT:

- Module 1: DevSecOps Advanced Basics
  - Why Advance Practices?
  - General Awareness
  - People-Finding Them
  - Core Process
  - Technology Overview
- Module 2: Understanding Applied Metrics
  - Metric Terms
  - Accelerating
  - People-Reporting and Recording
  - Integrating Process
  - Technology Automation
- Module 3: Architecting and Planning for DevSecOps
  - Architecture Basics
  - Finding an Architect
  - Reporting and Recording
  - Environments Process
  - Accelerating Decisions
- Module 4: Creating a DevSecOps Infrastructure
  - What is Infrastructure?
  - Equipping the Team
  - Design Challenges
  - Monitoring Infrastructure
- Module 5: Establishing a Pipeline
  - Pipelines and Workflows
  - Engineers and Capabilities
  - Continuous Engagement
  - Automate and Identify
- Module 6: Observing DevSecOps Outcomes
  - Observability vs. Monitoring
  - Who gets which Report?
  - Setting Observation Points
  - Implementing Observability
- Module 7: Practical 3rd Way Applications
  - Revisiting 3rd Way
  - Building Experiments

- Getting the Most from the Experiment
- Module 8: The Future of DevOps
  - Looking Towards the Future
  - Staying Trained
  - Innovation
  - What, and from Who?
- Post-Class Assignments/Exercises
  - Extended advanced reading associated with Case Stories from the course

## REQUIREMENTS:

It is highly recommended that learners attend the DevSecOps Foundation course with an accredited DevOps Institute Education Partner and complete the DevSecOps Foundation certification prior to attending the DevSecOps Practitioner course and exam. An understanding and knowledge of common DevSecOps terminology, concepts, principles, and related work experience are recommended.

## Difficulty level



## CERTIFICATE:

Each participant receives a confirmation of completion an accredited training.

Successfully passing (65%) the 90-minute examination, consisting of 40 multiple-choice questions, leads to the DevSecOps Practitioner certificate. The certification is governed and maintained by DevOps Institute.

## TRAINER:

Authorized PeopleCert Trainer

## ADDITIONAL INFORMATION:

### LEARNER MATERIALS

- 24 hours of instructor-led training and exercise facilitation
- Learner Manual (excellent post-class reference)
- Participation in unique exercises designed to apply concepts
- Sample documents, templates, tools, and techniques

- Access to additional value-added resources and communities