



DevOps Foundation

Summary

Length: 16 hours Level: Foundational

The DevOps Foundation course provides a baseline understanding of key DevOps terminology to ensure everyone is talking the same language and highlights the benefits of DevOps to support organizational success. This course prepares you for the DevOps Foundation (DOFD) certification. This course may earn a Credly Badge.

Learning Objectives

The learning objectives for DevOps Foundation include an understanding of:

DevOps objectives and vocabulary

Benefits to the business and IT Principles and practices including Continuous Integration, Continuous Delivery, testing, security and the Three Ways DevOps relationship to Agile, Lean and ITSM

Improved workflows, communication and feedback loops

Automation practices including deployment pipelines and DevOps toolchains

Scaling DevOps for the enterprise

Critical success factors and key performance indicators

Real-life examples and results

Course Outline

1. Exploring DevOps

Defining DevOps

Why Does DevOps Matter?

2. Core DevOps Principles

The Three Ways

The First Way

The Theory of Constraints

The Second Way

The Third Way

Chaos Engineering

Learning Organizations

3. Key DevOps Practices

Continuous Delivery

Site Reliability & Resilience Engineering

DevSecOps

ChatOps

Kanban

4. Business and Technology Frameworks

Agile

ITSM

Lean

Safety Culture

Learning Organizations

Sociocracy/Holacracy
Continuous Funding

5. Culture, Behaviors & Operating Models

Defining Culture
Behavioral Models
Organizational maturity models
Target Operating Models

6. Automation & Architecting DevOps Toolchains

CI/CD
Cloud
Containers
Kubernetes
DevOps Toolchain

7. Measurement, Metrics, and Reporting

The Importance of Metrics
Technical Metrics
Business Metrics
Measuring & Reporting Metrics

8. Sharing, Shadowing and Evolving

Collaborative Platforms
Immersive, Experiential Learning
DevOps Leadership
Evolving Change

Audience

The target audience for the DevOps Foundation course includes Management, Operations, Developers, QA and Testing professionals such as: Individuals involved in IT development IT operations or IT service management Individuals who require an understanding of DevOps principles IT professionals working within, or about to enter, an Agile Service Design Environment The following IT roles: Automation Architects, Application Developers, Business Analysts, Business Managers, Business Stakeholders, Change Agents, Consultants, DevOps Consultants, DevOps Engineers, Infrastructure Architect, Integration Specialists, IT Directors, IT Managers, IT Operations, IT Team Leaders, Lean Coaches, Network Administrators, Operations Managers, Project Managers, Release Engineers, Software Developers, Software Tester/QA, System Administrators, Systems Engineers, System Integrators, Tool Providers.

Prerequisites

Familiarity with IT terminology and IT related work experience are recommended.