
DevOps Foundation®

Overview

The course provides an introduction to DevOps, the cultural & professional movement that stresses communication, collaboration, integration & automation to improve the flow of work between software developers and IT operations professionals.

Prerequisite Comments

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

Target Audience

This course is intended for:

Automation Architects
Business Analysts
Business Consultants
Business Stakeholders
Infrastructure Architects
IT Consultants
IT Leadership
IT Operations Staff
Project Managers
Release Engineers
Software Developers
Systems Engineers
Systems Integrators
Tool Suppliers

Course Objectives

The learning objectives for DevOpsFoundation include an understanding of: (1) DevOps objectives and vocabulary; (2) Benefits to the business and IT; (3) Principles and practices including Continuous Integration, Continuous Delivery, testing, security and the ThreeWays; (4) DevOps relationship to Agile, Lean and ITSM; (5) Improved workflows, communication and feedback loops; (6) Automation practices including deployment pipelines and DevOps toolchains; (7) Scaling DevOps for the enterprise; (8) Critical success factor sand key performance indicators; and (9) Real-life examples and results.

Course Outline

What is DevOps?

Definition, Goals, and Stakeholders

Why Now?

What's driving the Business and IT
Recent findings

The Business Perspective & Outcome Economy

The Golden Circle-Business 'Why'
Business Value of DevOps

The IT Perspective

Cultural and Technical Challenges
Can IT be Bi-modal?

DevOps Principles

The Three Ways (Phoenix Project)

Flow
Feedback
Continuous Learning and Experimentation
Theory of Constraints

DevOps Practices

Continuous Integration
Continuous Delivery and Deployment
DevSecOps
ChatOps
Kanban

DevOps and Other Frameworks

Agile: Scrum, SAFE, Paced-Layered Application Strategy
ITSM: ITIL, Agile Service Management
Lean: Basics, Practices, Value Stream Mapping, Improvement Kata

DevOps Values - Culture

What is Culture?
Cultural Debt
Managing Culture Change
Managing Conflict

Automation

Enablers, Benefits, Terms and First Steps for Getting Started
DevOps Toolchains
Deployment Pipeline

Lean as a DevOps Value

Measurement

DevOps Metrics

Sharing

Ideas for encouraging Sharing
Internal DevOps Days

DevOps in the Enterprise

Roles
Organizational Considerations
DevOps Teams

Getting Started

Challenges
Risks
Critical Success Factors

Related Courses, Certifications, Exams

- DevOps Foundation® Certified