DevOps F - DevOps Foundation®

Overview

Course Code	DevOps F	Duration	3.0 days

DevOps Foundation Certification Course, This sixteen (16) hour course provides an introduction to DevOps – the cultural and professional movement that stresses communication, collaboration, integration, and automation in order to improve the flow of work between software developers and IT operations professionals. Improved workflows will result in an improved ability to design, develop, deploy and operate software and services faster.

Audience

• Anyone seeking an understanding of DevOps principles, practices and cultural considerations

• Organizations wanting to instill a common DevOps vocabulary and mindset

• Employees and managers responsible for leading

• DevOps transformations Consultants, internal and external suppliers

Pre-Requisites

• Completion of pre-class assignment

• Familiarity with IT software development and operations responsibilities

Key Topics

Exploring DevOps

- Defining DevOps
- Why Does DevOps Matter?

Core DevOps Principles

- The Three Ways
- The First Way
- The Theory of Constraints

- The Second Way
- The Third Way
- Chaos Engineering
- Learning Organizations

Key DevOps Practices

- Continuous Delivery
- Site Reliability & Resilience Engineering
- DevSecOps
- ChatOps
- Kanban

Business and Technology Frameworks

- Agile
- ITSM
- Lean
- Safety Culture
- Learning Organizations
- Sociocracy/Holacracy
- Continuous Funding

Culture, Behaviors & Operating Models

- Defining Culture
- Behavioral Models
- Organizational maturity models
- Target Operating Models

Automation & Architecting DevOps Toolchains

- CI/CD
- Cloud
- Containers
- Kubernetes
- DevOps Toolchain

Measurement, Metrics, and Reporting

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

Sharing, Shadowing and Evolving

- Collaborative Platforms
- Immersive, Experiential Learning
- DevOps Leadership
- Evolving Change

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