

DevOps Foundation

This course is presented in association with DevOps Institute.

Duration: 3 days

This 3-day DevOps Foundation course provides the definitive 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.

This course features three days of instructor-led training and exercise facilitation, DevOps - The Basics (pre-class resource), a learner manual (excellent post-class reference), participation in unique exercises designed to apply concepts, sample documents, templates, tools and techniques, along with access to additional sources of information and communities.

Who Should Attend

The DevOps Foundation course is designed for:

- Individuals and organisations seeking a foundational understanding of DevOps
- Employees and managers responsible for designing, reengineering or improving process
- Consultants guiding their clients through process improvement initiatives
- Internal and external suppliers
- Process stakeholders

Learning Outcomes

The learning objectives for DevOps Foundation include an understanding of:

- DevOps objectives and vocabulary
- Benefits to business concepts and practices; including its relationship to Agile, Lean IT & IT Service Management
- Improved workflows
- Improved communication and feedback loops
- Reliance on automation
- Applying DevOps in an enterprise environment
- Critical success factors and key performance indicators
- Real-life examples and results

Course Contents

1. Course Introduction

- Course Goals
- Course Agenda

2. Why DevOps?

- The Business Perspective
- The IT Perspective
- Dev and Ops Stereotypes: Perceptions and Realities

3. What is DevOps?

- DevOps Introduction
- DevOps Stakeholders
- DevOps Goals
- DevOps Values
- DevOps Business Value
- What DevOps is NOT
- Who's Doing DevOps
- Enterprise DevOps

4. DevOps and Other Frameworks

- DevOps and IT Performance
- DevOps and Automation
- Measuring DevOps Success
- DevOps Principles

- DevOps Patterns
- DevOps and Other Frameworks DevOps and Agile
- DevOps and Lean
- DevOps and IT Service Management

5. DevOps Culture

- Understanding Organisational Culture
- Characteristics of Organisational Culture
- Characteristics of a DevOps Culture
- Managing Culture Change

6. DevOps Organisational Considerations

- DevOps Skills
- DevOps Teams
- DevOps Organisational Structures
- DevOps Roles
- Promoting Collaboration
- Improving Communication

7. DevOps Practices

- Continuous Integration
- Continuous Delivery
- Continuous Deployment
- Value Stream Mapping

- Kanban
- Theory of Constraints
- Experimentation and Learning
- The Deming Cycle
- Improvement Kata
- Preparing for Failure
- ITSM Process Improvement Practices

8. DevOps Automation Practices and Tool Categories

- DevOps Automation Practices
- Where to Begin
- Application Life Concerns and Tool Categories

9. Adopting a DevOps Culture

- Getting Started
- Challenges, Risks and Critical Success Factors

10. Summary and Exam Preparations

- Additional Sources of Information
- Exam Requirements, Question Weighting and Terminology List
- Sample Exam Review