Course Title: DevOps Engineering Foundation	**Course Duration**: 2.0 Days
Exam: Included	**Exam Type**: Proctored Exam
Qualification: DevOps Engineering Foundation Certificate	

Course Syllabus

Our DevOps Engineering Foundation training course contains the following modules:

Module 1: DevOps Engineering Introduction

- DevOps Foundations
- Principles and Practices
- Related Frameworks
- Performance and Benefits

Module 2: DevOps Technology

- Source and Artefacts Control
- CI/CD pipelines
- Tools and Toolchains
- Application Release Automation
- Value Stream Management

Module 3: Applications Architectures and Continuous Integration

- Application Architectures
- Containers
- Continuous integration

Module 4: Continuous Testing

- CT Tenets
- Test creation & TDD (Test Driven Development)
- Test acceleration
- Test results
- Test management
- Test environment management

Module 5: Ephemeral Elastic Infrastructures

- Virtual and Cloud
- Configuration management
- Infra-as-code
- Containers Orchestration
- GitOps

Module 6: Continuous Delivery and Deployment

- Continuous Delivery and Deployment
- Release Automation
- Deployment Strategies

Module 7: Metrics, Monitoring, Observability, Governance

- DevOps Metrics
- Monitoring
- Observability
- Governance

Module 8: DevOps Engineering Humans

- Culture
- Team Topologies
- Continuous Learning
- Future DevOps Trends

Course Overview

Our two-day DevOps Engineering Foundation training course provides the many aspects of DevOps engineering that leaders and practitioners can execute upon. While DevOps Foundation provides an overview of DevOps, this course will look closely at the implementation process from an engineering perspective.

It is an in-depth view of the significant aspects of engineering DevOps. An engineering approach is critical to DevOps journeys. This course provides the foundations of knowledge, principles, and practices from a technical perspective needed to engineer a successful DevOps solution.

Course Learning Outcomes

Our DevOps Engineering Foundation training course will yield the following outcomes:

- Engineer DevOps solutions.
- Understand DevOps technologies.
- Work with application architectures.
- Employ continuous testing and continuous integration of best practices.
- Utilise ephemeral elastic infrastructures.
- Implement continuous delivery and deployment.

Audience

Our DevOps Engineer Foundation training course may appeal to the following roles:

- Software Developers
- System Administrators/Operations Professionals
- Quality Assurance/Test Engineers
- Release Managers
- IT Professionals with Cross-Disciplinary Interests
- DevOps Practice owners and process designers

- Employees and Managers responsible for engineering or improving processes.
- Consultants guiding their clients through process improvement and DevOps initiatives.
- Developers, QA (Quality Assurance) Engineers, and Managers interested in understanding how DevOps works.

Entry-Level Requirements

Some familiarity with DevOps processes and Agile is recommended for our DevOps Engineering Foundation training course.

Recommended Reading

There is no recommended reading for our DevOps Engineering Foundation training course.

What's Included

Our DevOps Engineering Foundation training course includes the following:

- Pre-reading
- Course Manual
- Quizzes
- Exercises

Exam Information

DevOps Engineering Foundation Examination:

- Format: Multiple Choice
- Duration: 60 Minutes
- Number of Questions: 40
- Pass Score: 65%
- Certification Validity: 2 Years

What's Next

Our two-day Site Reliability Engineering (SRE) Foundation? training course Introduces a range of practices for improving service reliability through a mixture of automation, working methods and organisational re-alignment. Tailored for those focused on large-scale service availability.

Our Site Reliability Engineering (SRE) Foundation? training course highlights the evolution of SRE and its future direction, and equips participants with the practices, methods, and tools to engage people across the organization involved in reliability and stability evidenced through the use of real-life scenarios and case stories.

Additional Information

A career as a DevOps engineer offers numerous benefits. here are some advantages of working in this field including but not limited to:

Collaboration and Communication: DevOps engineers work closely with cross-functional teams, including developers, operations professionals, and stakeholders.

Automation and Efficiency: DevOps emphasizes automation of repetitive tasks, such as builds, deployments, and infrastructure provisioning.

Continuous Learning and Improvement: DevOps is rooted in continuous improvement. DevOps engineers are encouraged to embrace a mindset of continuous learning, experimentation, and iteration.

Career Growth and Opportunities: The demand for DevOps engineers is high due to the increasing adoption of DevOps practices in organizations across various industries.

Competitive Compensation: DevOps engineers are in high demand, and their skill set is highly valued by organizations. As a result, they often enjoy competitive salaries and benefits packages.

Job Security: The principles and practices of DevOps are integral to modern software development and operations.

Impactful Work: DevOps engineers play a vital role in shaping and improving the software delivery process. By streamlining workflows, optimizing infrastructure, and promoting collaboration, they contribute to the successful and timely delivery of high-quality software.