

DevOps Engineering Foundation

TRAINING DATASHEET

Learn what DevOps Engineering is and how DevOps is engineered for success. Review of DevOps foundational principles and the transitions into implementing DevOps. The course is designed from an engineering point of view and covers topics such as DevOps in relation to other frameworks, technologies, application design practices, continuous integration practices, continuous delivery and deployment, continuous testing, elastic infrastructures, monitoring, metrics, observability, governance, human aspects, and future trends of DevOps engineering.

COURSE SYNOPSIS

DevOps is a complex maze that has many leaders frustrated. Many enterprises struggle with their DevOps journey, or even knowing where to start. There are many layers of people, process and technologies across each organization that are instrumental to engineering a successful DevOps implementation. DevOps is an evolving journey.

This course explains the many aspects of DevOps engineering that leaders and practitioners can execute upon. While DevOps Foundation provides an overview of DevOps, this course will provide a closer look at the implementation process from an engineering perspective. It is an in-depth view of the major aspects of engineering for DevOps. This engineering approach is critical to any DevOps journey.

This course provides the foundations of knowledge, principles and practices from a technical perspective needed to engineer a meaningful and successful DevOps solution for your organization.



COURSE DURATION

3 Days Instructor-Led Classroom Training

COURSE OBJECTIVES

On completion of this course, understanding of the following areas will be achieved:

- ▲ How to engineer DevOps solutions
- ▲ DevOps Technologies
- ▲ Applications Architectures
- ▲ Continuous Integration
- ▲ Continuous Testing
- ▲ Ephemeral Elastic Infrastructures
- ▲ Continuous Delivery and Deployment
- ▲ Metrics, Monitoring, Observability and Governance
- ▲ DevOps Humans
- ▲ Future Trends

WHO SHOULD ATTEND

The target audience for the DevOps Engineering Foundation course are individuals involved in engineering and technical practices, including :

- ▲ DevOps Practice owners and process designers
- ▲ Developers, QA engineers and Managers who are interested in understanding how DevOps works.
- ▲ Employees and managers responsible for engineering or improving processes.
- ▲ Consultants guiding their clients through process improvement and DevOps initiatives.
- ▲ Anyone responsible for:
 - Managing process-related requirements
 - Ensuring the efficiency and effectiveness of processes
 - Maximizing the value of processes

OUTLINE

- ▲ DevOps Engineering Introduction
 - DevOps Foundations
 - Principles and Practices
 - Related Frameworks
 - Performance and Benefits
- ▲ DevOps Technology
 - Source and Artifacts Control
 - CI/CD pipelines
 - Tools and Toolchains
 - Application Release Automation
 - Value Stream Management
- ▲ Applications Architectures and Continuous Integration
 - Application Architectures
 - Containers
 - Continuous integration
- ▲ Continuous Testing
 - CT Tenets
 - Test creation & TDD
 - Test acceleration
 - Test results
 - Test management
 - Test environment management
- ▲ Ephemeral Elastic Infrastructures
 - Virtual and Cloud
 - Configuration management
 - Infra-as-code
 - Containers Orchestration
 - GitOps
- ▲ Continuous Delivery and Deployment
 - Continuous Delivery and Deployment
 - Release Automation
 - Deployment Strategies
- ▲ Metrics, Monitoring, Observability, Governance
 - DevOps Metrics
 - Monitoring
 - Observability
 - Governance
- ▲ DevOps Engineering Humans
 - Culture
 - Team Topologies
 - Continuous Learning
 - Future DevOps Trends



CERTIFICATION

Participants who successfully complete the course and pass the examination will be recognized as certified with DevOps Engineering Foundation issued by DevOps Institute. Delegates who do not attain a passing score for the examination would be awarded a course attendance certificate only.

PRE-REQUISITES

There are no prerequisites to attending the DevOps Engineering Foundation course or for sitting for the DevOps Engineering Foundation certification examination.

PRE-COURSE READING

There are no mandatory pre-course reading materials. Some familiarity with DevOps processes and Agile is advantageous.

EXAMINATION FORMAT

- ▲ 40 Multiple Choice
- ▲ 1 mark per correct answer
- ▲ 26 marks required to pass (out of 40 available) – 65%
- ▲ One hour duration
- ▲ Web-based open-book exams

CONTACT US

📍 243 Beach Road #02-01 Singapore 18975 📞 +65 6729 2976

✉ enquiries@sapience-consulting.com

🌐 www.sapience-consulting.com