

DURATION - 16 Hours

Learn what DevOps Engineering is, why DevOps engineering is important, and how DevOps is engineered for success.

The course opens with a short review of DevOps foundational principles and then transitions into implementing DevOps. It 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.

OVERVIEW

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 solution. DevOps is not something you go get a quote for and simply buy. It's 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 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.

This course positions learners to successfully complete the DevOps Engineering Foundation exam.

COURSE OBJECTIVES

The learning objectives for DevOps Engineering Foundation include an understanding of:

- 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

AUDIENCE

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

- 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

LEARNER MATERIALS

- Sixteen (16) hours of instructor-led training and exercise facilitation
- Learner Manual (excellent post-class reference)
- Participation in unique exercises designed to apply concepts
- Sample exam and exam requirements guidelines
- Access to additional sources of information and communities

PREREQUISITES

• Some familiarity with DevOps processes and Agile is recommended

CERTIFICATION EXAM

Successfully passing (65%) the 60-minute exam, consisting of 40 multiple-choice questions, leads to the candidate's designation as DevOps Engineering Foundation certified. The certification is governed and maintained by DevOps Institute.



COURSE OUTLINE

- Module 1: DevOps Engineering Introduction
- Module 2: DevOps Technology
- Module 3: Applications Architectures and Continuous Integration
- Module 4: Continuous Testing
- Module 5: Ephemeral Elastic Infrastructures
- Module 6: Continuous Delivery and Deployment
- Module 7: Metrics, Monitoring, Observability, Governance
- Module 8: DevOps Engineering Humans