DevOps Foundation

TRAINING DATASHEET

Learn about DevOps to support organizational effort in reducing costs while increasing agility, quality and customer service. Leverage case studies, real-world success stories, and metrics to demonstrate business success in this foundation-level course to support digital transformation.

COURSE SYPNOSIS

As organizations are facing new entrants in their respective markets, they need to stay competitive and release new and updated products on a regular basis.

The course includes the latest thinking, principles and practices from the DevOps community including real-world case studies from high performing organizations including ING Bank, Ticketmaster, Capital One, Alaska Air, Target, Fannie Mae, Societe Generale, and Disney that engage and inspire learners, leveraging multimedia and interactive exercises that bring the learning experience to life, including the Three Ways as highlighted in the *Phoenix Project* by Gene Kim and the latest from the State of DevOps and DevOps Institute Upskilling reports.

Learners will gain an understanding of DevOps, the cultural and professional movement that stresses communication, collaboration, integration, and automation to improve the flow of work between software developers and IT operations professionals.

It is designed for a broad audience, enabling those on the business side to obtain an understanding of Kubernetes and Containers while those on the technical side will obtain an understanding as to the business value of DevOps to reduce cost, increase quality and enhance agility to support business objectives in support of digital transformation initiatives.

COURSE DURATION

3 Days Instructor-Led Classroom Training

COURSE OBJECTIVES

On completion of this course, the following learning outcomes will be achieved:

- 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

WHO SHOULD ATTEND

The target audience for this course and qualification include Management, Operations, Developers, QA and Testing professionals including:

- Individuals involved in IT development, IT operations or IT service management
- Individuals who require an understanding of DevOps principles IT professionals working within, or about to enter, an Agile Service Design Environment

OUTLINE

- 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

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CERTIFICATION

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

The DevOps Foundation course is a pre-requisite for sitting the DevOps advance-level courses and examination.

PRE-REQUISITES

There are no prerequisites to attending the DevOps Foundation course or for sitting for the DevOps Foundation certification examination. Familiarity with IT terminology and IT related work experience is advantageous.

PRE-COURSE READING

There are no mandatory pre-course reading materials. A pre-course reading resource "DevOps – the Basics" is recommended and can be provided.

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

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