

DevOps Foundation

Course Objectives

The learning objectives for DevOps Foundation include an understanding of:

- 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 tool chains
- Scaling DevOps for the enterprise
- Critical success factors and key performance indicators
- Real-life examples and results

Duration

3 Days

Who Should Attend

The target audience for the DevOps Foundation course includes Management, Operations, Developers, QA and Testing professionals such as:

- Individuals involved in IT development, IT operations or IT service management
- Individuals who require an understanding of DevOps principles IT professional working within, or about to enter an agile Service Design Environment
- The following IT roles: Automation Architects, Application Developers, Business Analysts, Business Managers, Business Stakeholders, Change Agents, Consultants, DevOps Consultants, DevOps Engineers, Infrastructure Architect, Integration Specialists, IT Directors, IT Managers, IT Operations, IT Team Leaders, Lean Coaches, Network Administrators, Operations Managers, Project Managers, Release Engineers, Software Developers, Software Tester/QA, System Administrators, System Engineers, System Integrators, Tool Providers.

Prerequisites

Familiarity with IT terminology and IT related work experience are recommended.

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Course Topics

Module 1	Exploring DevOps - Defining DevOps - Why Does DevOps Matter?
Module 2	Core DevOps Principles - The Three Ways - The First Way - The Theory of Constraints - The Second Way - The Third Way - Chaos Engineering - Learning Organizations
Module 3	Key DevOps Practices - Continuous Delivery - Site Reliability & Resilience Engineering - DevSecOps - ChatOps - Kanban
Module 4	Business and Technology Frameworks - Agile - ITSM - Lean - Safety Culture - Learning Organizations - Sociocracy / Holacracy - Continuous Funding
Module 5	Culture, Behaviors & Operation Models - Define Culture - Behavioural Models - Organizational maturity models - Target Operating Models

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Module 6	Automation and Architecting DevOps Toolchains • CI/CD • Cloud • Containers • Kubernetes • DevOps Toolchain
Module 7	Measurements, Metrics, and Reporting • The Importance of Metrics • Technical Metrics • Business Metrics • Measuring and Reporting Metrics
Module 8	Sharing, Shadowing and Evolving • Collaborative Platforms • Immersive, Experiential Learning • DevOps Leadership • Evolving Change