DevOps Foundation® Certification Course

Course Description:

This course provides an introduction to DevOps - the cultural and professional movement that stresses communication, collaboration, integration and automation in order to improve the flow of work between software developers and IT operations professionals. Improved workflows will result in an improved ability to design, develop, deploy and operate software and services faster.

DevOps Institute® and ITSM Academy® provides the course curriculum and the exam is provided through DevOps Institute®.

Course Objectives: Attendees acquire 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 toolchains
- ✓ Scaling DevOps for the enterprise
- ✓ Critical success factors and key performance indicators
- ✓ Real-life examples and results

Audience: The primary audience for this course includes the following business professionals: Application Developers, Business Analysts, Business Managers, Change Agents, Consultants, DevOps Consultants, DevOps Engineers, Infrastructure Architects, Integration Specialists, IT Managers, IT Operations, Lean Coaches, Network Administrators, Operations Managers, Project Managers, Release Engineers, Software Testers/QA, System Administrators, and Systems Engineers. (Min: 5, Max: 20)

Course Length: 16 hours (can be 2-4 days based on customer schedule preference)

Prerequisites: Familiarity with IT software development & operations responsibilities

Course Materials:

- ✓ Instructor-led education and assignment facilitation
- ✓ Pre-class resources, including DevOps - the Basics
- ✓ Learner Manual (excellent post-class reference)
- ✓ Participation in our in-class GAMEON! An Interactive Learning Experience®
- ✓ Sample exams and exam preparation
- ✓ Sample documents, templates, tools and techniques
- ✓ Access to additional sources of information and communities
- ✓ DevOps Foundation examination provide by DevOps Institute

Certification Exam:

Learners who choose to certify in this DevOps discipline will be equipped to earn the **DevOps Foundation® Certification** by achieving a passing score (65%) on the 60-minute exam, consisting of 40 multiple choice questions. Participants are provided with an **exam voucher** so they can schedule the exam at their convenience after the course.

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Course Outline: DevOps Foundation

Module 1: Exploring DevOps
- Defining DevOps
- Why Does DevOps Matter
- The Business Perspective
- The IT Perspective

Module 2: Core DevOps Principles
- The Three Ways
- The Theory of Constraints
- Chaos Engineering

Module 3: Key DevOps Practices
- Continuous Testing, Integration, Delivery, Deployment
- Site Reliability & Resilience
- DevSecOps, ChatOps, Kanban

Module 4: Business and Technology Frameworks
- Agile, ITSM
- Lean
- Safety Culture
- Learning Organizations

Module 5: Culture, Behaviors and Operating Models
- Defining Culture
- Behavior Models
- Organizational Models & Change
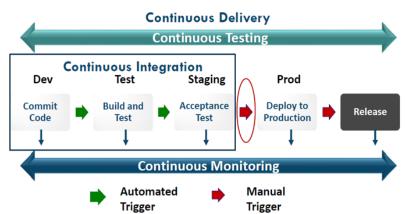
Module 6: Automation & Architecting DevOps Toolchains
- CI/CD and Automation
- Cloud, Containers & Microservices
- DevOps Toolchains

Module 7: Measurement, Metrics & Reporting
- The Importance of Measurement
- DevOps Metrics
- Change Lead/Cycle Times

Module 8: Sharing, Shadowing & Evolving
- DevOps in the Enterprise
- DevOps Leadership
- Organizational Considerations
- Getting Started
- Challenges, Risks & Critical Success Factors