DevOps Foundation Course
(2-Day Classroom Training)

This sixteen (16) hour 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 for the benefit of the business.

This course is designed to provide the basic education needed to build your DevOps vocabulary and to understand its principles and practices. More importantly, this course is designed to inspire you to serve as a change champion by sharing and using what you've learned – and continue to learn – about DevOps to lead and mentor others.

Audience

- Individuals involved in IT development, IT operations or IT service management, particularly those in an enterprise environment
- Individuals who require a detailed understanding of DevOps principles
- IT professionals working within, or about to enter, an Agile service design environment and requiring a detailed understanding of the concepts involved in interfacing Agile and DevOps
- Individuals who require an understanding of the culture changes associated with adopting DevOps

Learning Objectives

Individuals certified at this level will have demonstrated their understanding of DevOps:

- Goals, objectives and vocabulary
- Benefits to the business
- Performance measures and real-world results
- Principles
- Concepts and practices (including DevOps' relationship to Agile, Lean and IT Service Management (ITSM))
- Culture and organizational considerations
- Communication and collaboration practices
- Automation practices and technology considerations

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- Adoption considerations (particularly in an enterprise environment)
- Challenges, risks and critical success factors

Benefits of Taking This Course

This course will help you understand:

- Why organizations are adopting DevOps practices from both the business and IT perspectives
- How to answer the question 'What is DevOps?'
- DevOps values and principles
- How DevOps interfaces with other frameworks such as agile, lean and IT service management
- The characteristics of a DevOps culture
- DevOps organizational considerations including DevOps roles, teams and organizational structures
- Key DevOps practices
- Common DevOps automation practices and tool categories
- How to adopt a DevOps Culture

Prerequisite

- Completion of pre-class reading assignments
- Familiarity with IT and IT services is recommended

Follow-on Courses

Courses you can take after this course include:

- ITSM-related courses (such as ITIL- or ISO/IEC 20000-related courses)
- Certified Agile Service Manager (CASM)
- Certified Agile Process Owner (CAPO)

Course Materials

You will receive the following as part of this course:

- Access to pre-class reading and review materials
    - o DevOps - The Basics
    - o DevOps Reference Card
- Learner manual (excellent post-class reference manual)

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- Valuable sample documents and templates
- Participation in practical in-class assignments
- Study aids, sample exam and exam preparation guidance and tips
- In-class examination or web examination (virtual classroom)

Examination

- Exam Format:
  - Closed-book format
  - Web-Based / Paper-Based
  - Participants may bring scratch paper
- Questions: 40 multiple choice questions
- Passing Score: 65%
- Exam Duration:
  - 60 minutes
  - 15 minutes extra time for non-native english speakers.
- Proctoring: Live / Webcam

Technical Requirements

For eBooks:
- Internet for downloading the eBook
- Laptop, tablet, Smart Phone, eReader (no Kindle)
- Adobe DRM supported software (e.g. Digital Editions, Bluefire Reader)
- eBook download and activation instructions

Agenda

Pre-course Reading	Day 1	Day 2
1. DevOps - The Basics	1. Why DevOps?	1. DevOps Organizational Considerations
2. DevOps Reference Card	2. What is DevOps?	2. DevOps Practices
	3. DevOps Principles	3. DevOps Automation Practices and Tool Categories
	4. DevOps and Other Frameworks	4. Adopting a DevOps Culture
	5. DevOps Culture	5. Exam review

Course Outline

- Course Introduction
  - Exam Requirements and Weights
- Why DevOps?
  - The Business Perspective
  - The IT Perspective
  - Dev and Ops Stereotypes: Perceptions and Realities

- What is DevOps?
  - DevOps Introduction
  - DevOps Goals
  - DevOps Business Value
  - Demonstrated Results
  - Enterprise DevOps
- DevOps Principles (The Three Ways)
- DevOps and Other Frameworks
  - DevOps and Agile
  - DevOps and Lean
  - DevOps and IT Service Management
- DevOps Culture
  - Characteristics of a DevOps Culture
- DevOps Organizational Considerations
  - DevOps Stakeholders
  - DevOps Roles
  - DevOps Teams
  - DevOps Organizational Structures
- DevOps Practices
  - Continuous Integration
  - Continuous Delivery
  - Continuous Deployment
  - Value Stream Mapping
  - Kanban
  - Theory of Constraints
  - Improvement Kata
  - The Deming Cycle
  - ITSM Practices
- DevOps and Automation
  - DevOps Automation Practices
  - DevOps Application Life Concerns and Tool Categories
- Adopting a DevOps Culture
  - Getting Started
  - Challenges, Risks and Critical Success Factors
  - Measuring DevOps Success
- Additional Sources of Information
- Exam Taking Tips
- Sample Exam