

DevOps Institute DevOps Foundation Training

DevOps Institute Authorized Training · Applied Technology Academy

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.

LEVEL Beginner	DURATION 2 Days	EXPERIENCE 1 year: IT Software & Operations	AVERAGE SALARY \$134,040	LABS No
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Course Overview

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.

The course is designed for a broad audience, enabling those on the business side to obtain an understanding of microservices and containers. Those on the technical side will obtain an understanding as to the business value of DevOps to reduce cost (15-25% overall IT cost reduction) with increased quality (50-70% reduction in change failure rate) and agility (up to 90% reduction in provision and deployment time) to support business objectives in support of digital transformation initiatives.

Unique and exciting exercises will be used to apply the concepts covered in the course and sample documents, templates, tools, and techniques will be provided to use after the class.

This certification positions learners to successfully complete the DevOps Foundation examination.

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

Course Outline

- **Lesson 1: Exploring DevOps**
 - Defining DevOps
 - Why Does DevOps Matter
 - The Business Perspective
 - The IT Perspective
- **Lesson 2: Core DevOps Principles**
 - The Three Ways
 - The Theory of Constraints
 - Chaos Engineering
 - Learning Organizations
- **Lesson 3: Key DevOps Principles**
 - Continuous Testing and Integration, Delivery Deployment
 - Site Reliability & Resilience Engineering
 - DevSecOps
 - ChatOps
 - Kanban
- **Lesson 4: Business and Technology Frameworks**
 - Agile
 - ITSM
 - Lean
 - Safety Culture
 - Learning Organizations
 - Continuous Funding
- **Lesson 5: Culture, Behaviors, and Operating Models**
 - Defining Culture
 - Cultural Debt
 - Behavioral Models
 - Organizational Models
- **Lesson 6: Automation & Architecting DevOps Toolchains**
 - Continuous Integration/Delivery
 - Infrastructure as Code
 - Cloud
 - Containers & Microservices
 - Machine Learning
 - DevOps Toolchains

- **Lesson 7: Measurement, Metrics, & Reporting**
 - The Importance of Measurement
 - DevOps Metrics
 - Change lead/cycle times
 - Value Driven Metrics
- **Lesson 8: Sharing, Shadowing, & Evolving**
 - DevOps Days
 - DevOps in the Enterprise
 - Roles
 - DevOps Leadership
 - Organizational Considerations
 - Getting Started
 - Challenges, Risks, and Critical Success Factors

Intended Audience

- 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

Prerequisites

Familiarity with IT terminology and IT related work experience are recommended

Follow-On Courses

DevOps Leader (DOL)

Ready to enroll? Call 800.674.3550 or email Info@AppliedTechAc.com — private team cohorts, GSA MAS purchasing, military credentialing funding, VA GI Bill and VR&E and student financing available.