

## DASA DEVOPS FUNDAMENTALS

Duration: 3 Days; Instructor-led

### COURSE DESCRIPTION

This 3-day course provides an introduction to DevOps the cultural and professional movement that stresses communication, collaboration, integration and course automation in order to improve the flow of work between software developers and IT operations professionals. To maximize then IT value flow to customers, DevOps creates an improved ability to design, develop, deploy and operate software and services faster for the benefit of the business. Higher customer satisfaction, better quality, faster delivery and lower costs are all benefits of DevOps.

### WHAT YOU WILL LEARN

This course is designed to provide you with the background knowledge you need to build your DevOps vocabulary and to understand the principle and practices of DevOps. More importantly, this course is designed to inspire you to serve as a change champion who leads and mentor's others by sharing and using what you have learned and continue to learn about DevOps.

### AUDIENCE

Anyone who requires a detailed understanding of DevOps principles, such as project and business managers, all professionals involved in IT quality assurance, testing and service management and anyone involved in the development, operation and delivery of IT services.

### PREREQUISITES

Knowledge of IT and familiarity with IT services is recommended

### METHODOLOGY

This program will be conducted with interactive lectures, PowerPoint presentations, discussions and practical exercises

### COURSE OBJECTIVES

At the end of this course the student will be able to:

- Explain the drivers responsible for the emergence of DevOps.
- Define and discuss the key concepts and principles of DevOps.
- List and explain the business benefits of DevOps and continuous delivery.
- Describe the Service Delivery process.
- Explain the concepts of test automation, infrastructure automation, and build and deployment automation.
- Describe how DevOps relates to Lean and Agile methodologies.
- Summarize case studies of IT organizations that are making the transformation to Adaptive IT and DevOps models.
- List the most common and popular DevOps tools.
- Discuss the critical success factors for DevOps implementation.

### COURSE OUTLINE

#### DEVOPS INTRODUCTION

- Emergence of DevOps
- Core Concepts of DevOps
- DevOps Agile Skills Association (DASA)

#### CULTURE

- Introduction to a DevOps Culture
- Key Elements of DevOps
- Implementation of a DevOps Culture

#### ORGANIZATION

- Organizational Models
- Autonomous Teams
- Architecture Styles
- Governance

#### PROCESSES

- Introduction to Agile, Scrum, and Kanban
- DevOps in Relation to ITSM
- Scrum Essentials
- Optimization of Processes Using Lean
- Business Value Optimization and Business Analysis Using Story Mapping
- Software Delivery Lifecycle in a DevOps Organization

## **AUTOMATION**

- Automation for Delivery of Software
- Continuous Delivery Core Concepts
- Continuous Delivery Automation Concepts
- Continuous Delivery Automation Focus Topics
- Emergence of Cloud Technology and Principles
- Automated Provisioning Concepts
- Platform Product Characteristics and Application Maturity

## **MEASURE AND IMPROVEMENT**

- Importance of Measurement
- Identify Right Metrics
- Top Five Predictors of IT Performance
- Monitoring and Logging