

DevOps Test Engineering (DTE)

Course Duration: 16 hours

OVERVIEW

This comprehensive course addresses testing in a DevOps environment and covers concepts such as the active use of test automation, testing earlier in the development cycle, and instilling testing skills in developers, quality assurance, security, and operational teams.

The course is relevant for every modern IT professional involved in defining or deploying a DevOps testing strategy for their organization, as test engineering is the backbone of DevOps and the primary key for successful DevOps pipeline to support digital transformation.

Actionable 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 leverage after the class.

This certification positions learners to successfully complete the DevOps Test Engineering exam.

COURSE OBJECTIVES

The learning objectives for DTE include a practical understanding of:

- The purpose, benefits, concepts, and vocabulary of DevOps testing
- How DevOps testing differs from other types of testing
- DevOps testing strategies, test management, and results analysis
- Strategies for selecting test tools and implementing test automation
- Integration of DevOps testing into Continuous Integration and Continuous Delivery workflows
- How DevOps testers fit with a DevOps culture, organization, and roles

AUDIENCE

The target audience for the DevOps Test Engineering course is anyone involved in defining a DevOps Testing strategy, such as

- Delivery Staff
- DevOps Engineers
- IT Managers
- Project Managers
- Lab Staff
- Maintenance and Support Staff
- Quality Assurance Managers
- Quality Assurance Teams
- Release Managers
- Testers and Software Engineers

COURSE OUTLINE

- DevOps Testing Terminology
- Culture changes
- Organization changes
- Process and team friction
- Motivation strategies
- Measuring Success
- Continuous Evolution
- Troubleshooting

Test Automation Frameworks
Test Tools
Selection criterion
Automated metrics

What is the DevOps pipeline?

- DevOps Testing on the pipeline
- Test strategy choices
- Pre-Flight strategies
- Continuous Integration Testing
- System, Delivery and Customer Testing
- Test Environments
- Lab Management
- Topology orchestration

Key concepts:

Test Case Best Practices & Design Exercise
Test Suite Best Practices & Design Exercise
Principles of DevOps Management
DevOps Test Management Metrics
DevOps Management Tools
DevOps Test Results Analysis
Integrating DevOps Results Analysis
Test Management Exercise
Fictitious Product Test Requirements Individual Exercise
Class discussion
Exam Preparation

LEARNER MATERIALS

- Sixteen (16) hours of instructor-led training and exercise facilitation
- Digital Learner Manual (excellent post-class reference)
- Participation in exercises designed to apply concepts
- Sample documents, templates, tools and techniques
- Access to additional sources of information and communities

CERTIFICATION EXAM

Successfully passing (65%) the 90-minute examination, consisting of 40 multiple-choice questions, leads to the candidate's designation as a certified DevOps Test Engineer (DTE). The certification is governed and maintained by the DevOps Institute.