

# AZ-2006: Automate Azure Load Testing by using GitHub Actions Course

**Course Duration: 8 Hours**

**Course code: AZ-2006**

## 1. Course Overview

The AZ-2006: Automate Azure Load Testing by using GitHub Actions course provides hands-on training to integrate Azure Load Testing with GitHub Actions for automated performance testing in CI/CD workflows. Participants will learn how to configure Azure Load Testing, create test scripts, integrate them into GitHub pipelines, and analyze performance metrics. This training is ideal for professionals aiming to ensure application reliability, scalability, and performance through automation.

## 2. What you'll learn?

By the end of this course, you will be able to:

- Understand Azure Load Testing fundamentals and capabilities.
- Set up Azure Load Testing resources and test plans.
- Integrate Azure Load Testing into GitHub Actions workflows.
- Automate performance testing as part of CI/CD pipelines.
- Analyze test results and performance metrics to identify bottlenecks.
- Implement best practices for continuous performance monitoring.

## 3. Target Audience

This course is ideal for:

- DevOps Engineers
- Cloud Engineers
- Performance Testers
- Software Developers
- QA Engineers

- IT Professionals involved in CI/CD automation and cloud-based testing

## 4. Pre-Requisites

Learners should have:

- Basic knowledge of Azure services and Azure DevOps or GitHub
- Understanding of CI/CD concepts
- Familiarity with performance/load testing principles
- Experience with YAML pipelines and scripting is beneficial

## 5. Course content

### Module 1: Introduction to Azure Load Testing

- Overview of Azure Load Testing
- Benefits and use cases
- Supported test scenarios

### Module 2: Setting Up Azure Load Testing

- Creating an Azure Load Testing resource
- Configuring test plans and test scripts
- Using JMeter for load testing

### Module 3: Introduction to GitHub Actions

- GitHub Actions basics
- Workflow structure and YAML syntax
- Managing secrets and environment variables

### Module 4: Integrating Azure Load Testing with GitHub Actions

- Setting up service connections

- Adding load testing steps to CI/CD pipelines
- Triggering automated load tests on code commits

### **Module 5: Analyzing and Interpreting Results**

- Viewing performance metrics in Azure
- Identifying performance bottlenecks
- Generating reports

### **Module 6: Best Practices and Optimization**

- Continuous performance testing strategies
- Scaling and resource management
- Security considerations in load testing

