



TestOps[®]
CERTIFIED LEARNING PROGRAMME

Practitioner



SUMMARY

This course will teach you how software quality has evolved to become a critical component in delivering working, reliable and stable software. Covering all aspects of contemporary software quality from fundamentals on to principles and practices, through to techniques and tooling.



EXPECTED OUTCOMES

1. A solid understanding of the fundamental principles and practices of TestOps.
2. Be a able to confidently discuss and describe the key aspects of TestOps as a way of working.
3. Apply your knowledge to plan and implement TestOps driven solutions.



CONTENTS

1. Fundamentals of TestOps
2. The TestOps Framework
3. TestOps Principles, Practices & Processes
4. TestOps Methods, Techniques & Tools
5. Certification



LEARNING LEVEL

'Foundation Level' learning with no specific prerequisites, however experienced as a software testing practitioner or test manager is beneficial.



TARGET AUDIENCE

Anyone with an interest in broadening their understanding of quality assurance and its application in contemporary software delivery.



COURSE FORMAT

Trainer led using a combination of lecture based sessions, group discussions, 1:1 tutoring, Q&A learning checkpoints and practical exercises.



CERTIFIED EXAM

A 1 hour closed book exam, consisting of 40 multiple choice questions. Certification requires a minimum pass rate of 65%.for the closed book exam and successful completion of the exercise objectives.



1 FUNDAMENTALS OF TESTOPS

1.1 Software Testing Through The Ages

- 1.1.1 The past
- 1.1.2 Present
- 1.1.3 The Future

1.2 An Introduction To Testops

- 1.2.1 Background and Definition
- 1.2.2 Purpose and Objectives

1.3 Aspects of TestOps approaches and integrations

- 1.3.1 Agile
- 1.3.2 Waterfall
- 1.3.3 Continuous Testing
- 1.3.4 Continuous Integration
- 1.3.5 Continuous Delivery
- 1.3.6 DevOps

2 THE TESTOPS FRAMEWORK

2.1 Introduction

2.2 Disciplines

2.3 Process Overview

2.4 Functional Overview

2.5 Path To Production

- 2.5.1 DEV Environment
- 2.5.2 QA Environment
- 2.5.3 UAT Environment
- 2.5.4 PROD Environment



3 TESTOPS PRINCIPLES, PRACTICES & PROCESSES

3.1 Capability & Culture

3.2 User Stories & Acceptance Criteria

- 3.2.1 User Stories
- 3.2.2 Acceptance Criteria

3.3 Test Case Management

- 3.3.1 Test Organization
- 3.3.2 Test Planning and Estimation
- 3.3.3 Test Monitoring and Control
- 3.3.4 Configuration Management
- 3.3.5 Risks and Testing
- 3.3.6 Defect Management

3.4 Test Case Execution

- 3.4.1 Testing Throughout The Delivery Pipeline
- 3.4.2 Unit Testing
- 3.4.3 Component, API & Contract Testing
- 3.4.4 Integration Testing
- 3.4.5 End-to-End Testing
- 3.4.6 Exploratory Testing
- 3.4.7 Production Validation Testing

3.5 Automation & Integration

- 3.5.1 Continuous Integration
- 3.5.2 Continuous Testing
- 3.5.3 Executable Specifications
- 3.5.4 Version Control and Artefact Management
- 3.5.5 Automated Quality Checks
- 3.5.6 Automated Builds
- 3.5.7 Automated Data Management
- 3.5.8 Automated Releases
- 3.5.9 Automated Monitoring
- 3.5.10 Automated Reporting
- 3.5.11 Environment Management

3.6 Reporting & Business Intelligence

- 3.6.1 Reporting
- 3.6.2 Business Intelligence

3.7 Release Management

- 3.7.1 Release Management
- 3.7.2 Change Management

3.8 Documentation And Knowledge Sharing Contents



4. TESTOPS METHODS, TECHNIQUES & TOOLS

- 4.1 Test Case Management
- 4.2 Automation & Integration
 - 4.2.1 Continuous Integration
 - 4.2.2 Continuous Testing
 - 4.2.3 Version Control and Artefact Management
 - 4.2.4 Automated Quality Checks
 - 4.2.5 Automated Builds
 - 4.2.6 Automated Data Management
 - 4.2.7 Automated Monitoring
 - 4.2.8 Automated Reporting
 - 4.2.9 Environment Management
- 4.3 Business Intelligence
- 4.4 Release Management
- 4.5 Documentation And Knowledge Sharing
- 4.6 Example Tooling
- 4.7 Example Implementation

5 CERTIFICATION

- 5.1 Theory based examination
- 5.2 Practical skills based examination