End-to-End Process Testing in ERP Landscapes Training Course

Professional Development Training Course Outline

Category	Enterprise Resource Planning (ERP)	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

In today's complex enterprise environments, the reliability of ERP systems (Enterprise Resource Planning) is paramount to continuous business operations. Customizations, integrations, and frequent updates in modern systems like SAP S/4HANA and Oracle Cloud introduce significant risk. Traditional testing approaches fall short when validating complex, cross-functional flows like Order-to-Cash (O2C) and Procure-to-Pay (P2P). End-to-End Process Testing in ERP Landscapes Training Course addresses the critical need for a holistic testing strategy that ensures data integrity and seamless integration across all interconnected modules. We will explore advanced methodologies, including the "Shift-Left" approach and strategic test automation, to proactively identify and mitigate system failures that threaten operational efficiency and regulatory compliance.

This course provides a comprehensive, hands-on framework for designing, executing, and managing End-to-End (E2E) Process Testing within an ERP landscape. Participants will master creating realistic business process scenarios, managing sophisticated test data, and leveraging codeless test automation platforms for high-velocity and high-coverage testing. The core focus is on moving beyond component-level checks to validating the entire user journey across multiple systems and interfaces. By the end of this program, attendees will be equipped to transform their quality assurance functions into a strategic business enabler, significantly accelerating digital transformation initiatives while maintaining an ironclad grip on system quality and performance.

Programme Curriculum

End-to-End Process Testing in ERP Landscapes Training Course

Introduction

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Course Duration

5 days

Course Objectives

Upon completion, participants will be able to:

1. Design a robust E2E testing strategy optimized for large, complex ERP implementations.
2. Master the decomposition of critical cross-functional business processes into testable scenarios
3. Implement a Shift-Left testing approach to embed quality early in the development lifecycle.
4. Develop effective test data management techniques for realistic and secure testing environments.
5. Evaluate and select appropriate codeless test automation tools for ERP systems.
6. Configure and execute automated E2E test scripts across multiple integrated ERP modules.
7. Perform specialized non-functional tests, including integration testing and high-volume performance testing.
8. Define and track key performance indicators (KPIs) for testing, such as test coverage and defect resolution rate.
9. Plan and conduct thorough User Acceptance Testing (UAT) with key business stakeholders.
10. Implement and sustain Continuous Testing practices within a modern CI/CD pipeline.
11. Manage and version control test assets in compliance with ERP governance standards.
12. Analyze test results to provide data-driven insights for risk mitigation and go-live readiness.
13. Apply best practices for regression testing following routine system updates and patches

Target Audience

1. ERP Quality Assurance (QA) Managers
2. Business Process Owners/Analysts
3. ERP Testers (Manual and Automation)
4. IT/Project Managers overseeing ERP implementation or upgrades
5. Application Support Specialists
6. Heads of Center of Excellence (CoE) for Quality/Testing
7. System Integration Specialists

8. Internal Audit/Compliance Teams focused on system controls

Course Modules

Module 1: E2E Testing Strategy & Planning in ERP

- Defining the scope and role of End-to-End Testing in the ERP lifecycle.
- Developing a risk-based testing approach for high-impact business processes.
- Establishing a Test Center of Excellence framework and governance.
- Integrating testing into Agile/DevOps and the Shift-Left philosophy.
- Defining key test metrics.
- Case Study: Analyzing a global manufacturing firm's migration to SAP S/4HANA, focusing on their initial risk assessment and test scope prioritization.

Module 2: Business Process Decomposition and Scenarios

- Techniques for mapping and documenting critical business processes
- Decomposing E2E flows into atomic, reusable test components.
- Designing business process scenarios to simulate real-world user journeys.
- Creating a comprehensive Test Case Inventory and traceability matrix.
- Identifying and validating integration points and external system dependencies.
- Case Study: Walkthrough of the Procure-to-Pay cycle across Purchasing, Inventory, and Finance modules, identifying 5 key integration failure points.

Module 3: Test Data Management (TDM) and Environment Setup

- Best practices for creating a production-like test environment.
- Strategies for generating and managing synthetic test data for privacy/security compliance.
- Data masking, obfuscation, and sanitization techniques for non-production environments.
- Synchronizing test data across interconnected ERP modules and external systems.
- Tools and methods for rapid environment refreshing and data loading.
- Case Study: A financial services organization's challenge with HIPAA/GDPR compliance and their solution using data virtualization for testing the HR-Payroll process.

Module 4: ERP Test Automation Fundamentals

- Comparing traditional scripting with codeless test automation for ERP
- Developing an ERP Test Automation Strategy and roadmap.
- Selecting the right tools for a heterogeneous ERP landscape
- Creating reusable business components for scalable test maintenance.
- Calculating the potential Test Automation ROI for core ERP processes.
- Case Study: A retail company’s successful implementation of automated regression testing to reduce post-update defect leakage by 70%.

Module 5: Execution and Integration Testing

- Structuring test execution cycles
- Executing automated and manual tests in a hybrid model.
- Deep dive into API Testing for modern ERP integrations
- Monitoring and troubleshooting E2E test runs across distributed systems.
- Implementing Test Orchestration and scheduling in CI/CD tools

- Case Study: Analyzing the failure and subsequent fix of a complex Order-to-Cash (O2C) integration between a CRM, a Cloud ERP, and a 3PL logistics system.

Module 6: Specialized Non-Functional Testing

- Designing and executing ERP Performance Testing
- Validating system Security and Authorization controls for Segregation of Duties
- Disaster Recovery and Business Continuity testing for mission-critical processes.
- Accessibility and User Experience (UX) testing on new ERP interfaces.
- Defining and meeting non-functional requirements (NFRs) for system readiness.
- Case Study: A telecommunications company's stress test on their Billing module during peak month-end close volume and the resulting performance bottlenecks identified.

Module 7: User Acceptance Testing (UAT) and Readiness

- The critical role of Business Ownership in the UAT process.
- Planning, scoping, and managing the UAT phase with key stakeholders.
- Creating UAT sign-off criteria and the path to Go-Live approval.
- Techniques for capturing, prioritizing, and managing UAT defects and change requests.
- Measuring End-User Adoption and training effectiveness post-UAT.
- Case Study: A public sector organization’s UAT challenge with diverse user groups and how they achieved consensus and sign-off for a new budget management system.

Module 8: Maintenance, Reporting, and Continuous Improvement

- Strategies for effective test maintenance and adapting to continuous ERP updates.
- Establishing a Defect Management and Triage Process.
- Generating comprehensive Test Summary Reports for executive stakeholders.
- Implementing a Continuous Feedback Loop from production back to testing.
- Planning for long-term Test Asset Management and reusability.
- Case Study: A multinational enterprise's strategy for managing frequent system updates using a prioritized, automated regression test suite.

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call +254769199797

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

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