



End-to-End Agile Delivery with Azure Boards, Repos, Pipelines & Test Plans



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Course Overview:

This hands-on, practical training course dives into Agile software development principles and how to implement them effectively using Azure DevOps. From sprint planning and backlog refinement to CI/CD pipelines and test automation, participants will learn how to build a fully agile environment using Microsoft's DevOps toolchain. The course guides learners through configuring Azure Boards, Repos, Pipelines, Test Plans, and Artifacts — all within a collaborative framework that supports lean software delivery and real-world DevOps practices.

Target Audience:

- Agile Developers & Engineers
- Scrum Masters and Product Owners
- Software Project Managers
- DevOps Engineers
- Technical Leads

Targeted Organizational Departments:

- Software Development
- IT Operations
- QA & Testing
- Project Management Office PMO

Targeted Industries:

- Technology & Startups
- Financial Services
- Healthcare & Pharma
- E-commerce & Retail
- Government & Public Sector



Course Offerings:

Participants will learn to:

- Apply Agile principles in Azure DevOps projects
- Use Azure Boards to manage epics, features, and user stories
- Create efficient Git workflows in Azure Repos
- Implement CI/CD with Azure Pipelines
- Set up automated testing with Azure Test Plans
- Manage build artifacts and packages
- Integrate with GitHub, Jira, or external tools

Training Methodology:

- Interactive lectures & live demos
- Hands-on labs using Azure DevOps Portal
- Group sprints & backlog simulations
- Scenario-based problem solving
- Retrospective & reflection activities

Course Toolbox:

- Azure DevOps Project Portal
- Azure Repos & Branching Strategy Guide
- Sprint Planning & Agile Metrics Templates
- CI/CD Pipeline Sample YAML files
- Testing Strategy Checklists
- Integration Toolkit: GitHub, Slack, Jira plugins

Course Agenda:

Day 1: Foundations of Agile with Azure DevOps

- **Topic 1:** Introduction to Agile Methodologies Scrum, Kanban, SAFe
- **Topic 2:** Agile Roles and Ceremonies in Software Projects
- **Topic 3:** Overview of Azure DevOps Capabilities
- **Topic 4:** Setting Up a New Agile Project in Azure DevOps
- **Topic 5:** Navigating Azure Boards and Teams Configuration
- **Topic 6:** Planning Sprints and Creating Backlogs
- **Reflection & Review:** Agile foundations and tool familiarization



Day 2: Backlog Management and Collaboration

- **Topic 1:** Recap and Daily Standup Simulation
- **Topic 2:** Writing and Refining User Stories & Acceptance Criteria
- **Topic 3:** Estimating with Story Points and Velocity Tracking
- **Topic 4:** Managing Epics, Features, and Tasks in Azure Boards
- **Topic 5:** Setting Work-In-Progress Limits and Kanban Boards
- **Topic 6:** Connecting Azure Boards with GitHub Issues or Jira
- **Reflection & Review:** From planning to execution alignment

Day 3: Version Control and Azure Repos

- **Topic 1:** Git Essentials and Branching Strategy
- **Topic 2:** Creating and Managing Azure Repos
- **Topic 3:** Pull Requests, Code Reviews, and Branch Policies
- **Topic 4:** Merging, Conflict Resolution, and History Tracking
- **Topic 5:** Integrating Azure Repos with External Git Repositories
- **Topic 6:** Secure Code Practices and Repo Permissions
- **Reflection & Review:** Managing source code the agile way

Day 4: CI/CD Pipelines in Azure DevOps

- **Topic 1:** What is CI/CD and Why It Matters in Agile
- **Topic 2:** Designing Your First Build Pipeline with YAML
- **Topic 3:** Creating Release Pipelines for Multi-Stage Deployments
- **Topic 4:** Deployment to Azure App Services, Containers, and AKS
- **Topic 5:** Pipeline Triggers, Approvals, and Environment Variables
- **Topic 6:** Monitoring, Debugging, and Logging Build Failures
- **Reflection & Review:** Delivering working software continuously

Day 5: Testing, Artifacts, and Agile Metrics

- **Topic 1:** Agile Testing Principles & Test-Driven Development
- **Topic 2:** Implementing Azure Test Plans and Test Suites
- **Topic 3:** Automated Tests Integration into Pipelines
- **Topic 4:** Managing Artifacts and Package Feeds
- **Topic 5:** Agile KPIs: Lead Time, Cycle Time, Deployment Frequency
- **Topic 6:** Retrospectives and Continuous Improvement in Azure
- **Reflection & Review:** Final group presentation + wrap-up quiz

FAQ



What specific qualifications or prerequisites are needed for participants before enrolling in the course?

Participants should have basic knowledge of software development, version control Git, and Agile principles. Familiarity with Azure or any DevOps platform is a plus but not mandatory.

How long is each day's session, and is there a total number of hours required for the entire course?

Each day's session is generally structured to last around 4-5 hours, with breaks and interactive activities included. The total course duration spans five days, approximately 20-25 hours of instruction.

What is the difference between Azure DevOps and GitHub Actions for Agile teams?

Azure DevOps offers an integrated suite for Agile planning, CI/CD, testing, and artifacts all in one platform. GitHub Actions is focused primarily on automation. Azure DevOps is more suited for enterprise Agile teams needing structured project management.

How This Course is Different from Other Agile DevOps Courses:

Unlike generic Agile or Azure DevOps tutorials, this course is fully use-case driven, offering participants the practical know-how to run Agile projects end-to-end using Microsoft's cloud-native tools. By incorporating backlog grooming, sprint execution, GitOps, and CI/CD automation into one workflow, participants experience how real Agile teams operate in fast-paced development environments. Hands-on exercises, sprint simulations, YAML pipeline coding, and test plan creation all ensure practical proficiency — not just theory.



Training Course Categories

Agile PM and Project Management Training Courses

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IT Security Training & IT Training Courses

Leadership and Management Training Courses

Legal Training, Procurement and Contracting Courses

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Personal & Self-Development Training Courses

Quality and Operations Management Training Courses

Secretarial and Administration Training Courses



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