

Agile Software Development with Azure DevOps

Category: Project Management & Business Skills | **Vendor:** Microsoft

Duration: 24.00 hours (3 days)

19.5 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

In this Agile software development course you learn to manage an entire software project using Microsoft Team Foundation Server. You learn how to document work using features, backlog items, tasks and bugs, maintain source code with Team Foundation Version Control and Git, as well as monitor progress with backlogs, Kanban boards and burn-downs. You also gain hands-on experience automating testing and deployment with continuous integration.

About This Course

In this Agile software development course you learn to manage an entire software project using Microsoft Team Foundation Server. You learn how to document work using features, backlog items, tasks and bugs, maintain source code with Team Foundation Version Control and Git, as well as monitor progress with backlogs, Kanban boards and burn-downs. You also gain hands-on experience automating testing and deployment with continuous integration.

Prerequisites & Entry Requirements

General Prerequisites:

- Familiarity with Agile principles is helpful. You can gain this experience in course Agile Fundamentals: Scrum, Kanban, Lean and XP (AGFUND)
- Work experience using the iterative cycle and collaborative Agile spirit

This course uses Azure DevOps Server.

Learning Outcomes

Upon successful completion of this course, participants will be able to:

You will learn how to:

- Manage an entire software project using Microsoft Azure DevOps
- Document work using features, backlog items, tasks and bugs
- Monitor progress with backlogs, Kanban boards and burndowns
- Automate testing and deployment with continuous integration and continuous deployment (CI/CD)
- Enhance team collaboration and craft higher quality software in less time using Azure DevOps
- Perform check-in, check-out, branching, and merging of source code
- Define build configurations that include unit tests and deployment
- Estimate, prioritise, and schedule backlog items within sprints

Detailed Course Outline

Application Lifecycle Management with Azure DevOps

Overview of Agile methodologies

- Agile
- Scrum

Introducing Azure DevOps

Surveying Azure DevOps features

- Team collaboration
- Process templates
- Version control
- Automated builds
- Integrated tests

Evaluating Azure DevOps editions

- Choosing Azure DevOps Server vs. Azure DevOps Express
- Comparing Azure DevOps Service vs Azure DevOps Server

Administering Azure DevOps

Installing Azure DevOps

- Planning an Azure DevOps installation
- Creating collections with the administrative console
- Managing project security and group membership with the Web control panel

Securing Azure DevOps projects

- Assigning permissions to security groups
- Adding users to teams and projects
- Restricting user rights
- Configuring user alerts

Creating projects for Azure DevOps

- Comparing the built-in Scrum, CMMI and Agile process templates
- Specifying source control
- Customising process templates

Managing Work with Azure DevOps

Mapping Azure DevOps and Agile process terms

- Defining epics and user stories as Azure DevOps work items
- Inputting features and backlog items
- Estimating and prioritising work items
- Breaking backlog items into tasks

Organising backlogs

- Scheduling start and end dates for releases and Sprints
- Assigning backlog items to iterations and team members
- Recording work remaining and status
- Monitoring team progress

Maintaining Source Code with Version Control

Collaborating on code with Team Foundation Version Control (TFVC) and Git

- Selecting centralised vs. distributed version control
- Synchronising local repositories with the master repository
- Viewing project history with changesets

Connecting to Azure DevOps from Visual Studio Team Explorer

- Checking out and checking in source code
- Merging changesets from multiple developers
- Branching for release management and maintenance
- Resolving multi-user conflicts
- Adding existing code to Azure DevOps source control

Integrating version control with client applications

- Plugging TFVC into Windows Explorer

Achieving Continuous Integration

Creating, running and automating builds

- Defining and scheduling builds
- Managing releases and deployments
- Controlling build output

Crafting quality software through continuous testing

- Integrating unit testing into builds
- Leveraging Visual Studio code analysis and testing tools
- Creating TFS test scripts for manual testing
- Documenting and tracking bugs

Scheduling and Monitoring Team Progress

Managing backlogs and querying Azure DevOps content

- Assigning work to iterations
- Querying and defining iteration backlogs
- Visualising work-in-progress with Kanban boards
- Monitoring progress with burndown charts

Skills You Will Learn:

You will learn how to:

- Manage an entire software project using Microsoft Azure DevOps
- Document work using features, backlog items, tasks and bugs
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Frequently Asked Questions

Q: What delivery options are available for Agile Software Development with Azure DevOps?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
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Q: How many CPD hours does this course provide?

The 3-day Agile Software Development with Azure DevOps course provides up to 19.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Agile Software Development with Azure DevOps training?

The training takes place over 3 day(s), with each day lasting approximately 24.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Agile Software Development with Azure DevOps?

Yes, we provide corporate training, dedicated training, and closed classes for Agile Software Development with Azure DevOps. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Agile Software Development with Azure DevOps, Agile Training, ASDADO

Q: Why choose Nexus Human for Agile Software Development with Azure DevOps?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Agile Software Development with Azure DevOps training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

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