

# DESIGN AND IMPLEMENT MICROSOFT DEVOPS SOLUTIONS (AZ-400)

Course Code: 100779

This course provides the knowledge and skills to design and implement DevOps processes and practices.

Students will learn how to plan for DevOps, use source control, scale Git for an enterprise, consolidate artifacts, design a dependency management strategy, manage secrets, implement continuous integration, implement a container build strategy, design a release strategy, set up a release management workflow, implement a deployment pattern, and optimize feedback mechanisms.

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### **Microsoft Azure Certification Video**

## What You'll Learn

After completing this course, students will learn :

- AZ-400: Development for enterprise DevOps
- AZ-400: Implement CI with Azure Pipelines and GitHub Actions
- AZ-400: Design and implement a release strategy
- AZ-400: Implement a secure continuous deployment using Azure Pipelines
- AZ-400: Manage infrastructure as code using Azure and DSC
- AZ-400: Implement security and validate code bases for compliance
- AZ-400: Design and implement a dependency management strategy
- AZ-400: Implement continuous feedback

## Who Needs to Attend

Students in this course are interested in designing and implementing DevOps processes or in passing the Microsoft Azure DevOps Solutions certification exam.

# DESIGN AND IMPLEMENT MICROSOFT DEVOPS SOLUTIONS (AZ-400)

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CLASSROOM LIVE

\$2,595 USD

4 Day

## Classroom Live Outline

### AZ-400: Development for enterprise DevOps

- Introduction to DevOps
- Plan Agile with GitHub Projects and Azure Boards
- Design and implement branch strategies and workflows
- Collaborate with pull requests in Azure Repos
- Explore Git hooks
- Plan foster inner source
- Manage and configure repositories
- Identify technical debt

### AZ-400: Implement CI with Azure Pipelines and GitHub Actions

- Explore Azure Pipelines
- Manage Azure Pipeline agents and pools
- Describe pipelines and concurrency
- Design and implement a pipeline strategy
- Integrate with Azure Pipelines
- Introduction to GitHub Actions
- Learn continuous integration with GitHub Actions
- Design a container build strategy

### AZ-400: Design and implement a release strategy

- Create a release pipeline
- Explore release strategy recommendations
- Configure and Provision Environments
- Manage and modularize tasks and templates
- Automate inspection of health

### AZ-400: Implement a secure continuous deployment using Azure Pipelines

- Introduction to deployment patterns
- Implement blue-green deployment and feature toggles
- Implement canary releases and dark launching
- Implement A/B testing and progressive exposure deployment
- Integrate with identity management systems
- Manage application configuration data

#### AZ-400: Manage infrastructure as code using Azure and DSC

- Explore infrastructure as code and configuration management
- Create Azure resources using Azure Resource Manager templates
- Create Azure resources by using Azure CLI
- Explore Azure Automation with DevOps
- Implement Desired State Configuration (DSC)
- Implement Bicep

#### AZ-400: Implement security and validate code bases for compliance

- Introduction to Secure DevOps
- Implement open-source software
- Software Composition Analysis
- Security Monitoring and Governance

#### AZ-400: Design and implement a dependency management strategy

- Explore package dependencies
- Understand package management
- Migrate consolidate and secure artifacts
- Implement a versioning strategy
- Introduction to GitHub Packages

#### AZ-400: Implement continuous feedback

- Implement tools to track usage and flow
- Develop monitor and status dashboards
- Share knowledge within teams
- Design processes to automate application analytics
- Manage alerts, blameless retrospectives and a just culture

### Classroom Live Labs

- Lab : Agile Planning and Portfolio Management with Azure Boards
- Lab : Version Controlling with Git in Azure Repos
- Lab : Version Controlling with Git in Azure Repos
- Lab : Configuring Agent Pools and Understanding Pipeline Styles
- Lab : Enabling continuous integration with Azure Pipelines
- Lab : Integrating external source control with Azure Pipelines
- Lab : Implementing GitHub Actions by using DevOps Starter
- Lab : Deploying Docker Containers to Azure App Service web apps
- Lab : Controlling Deployments using Release Gates
- Lab : Creating a Release Dashboard

- Lab : Configuring pipelines as code with YAML
- Lab : Setting up and running functional tests
- Lab : Integrating Azure Key Vault with Azure DevOps
- Lab : Azure Deployments using Azure Resource Manager templates
- Lab : Implement security and compliance in Azure Pipelines
- Lab : Managing technical debt with SonarQube and Azure DevOps
- Lab : Package management with Azure Artifacts
- Lab : Monitoring application performance with Application Insights
- Lab : Integration between Azure DevOps and Microsoft Teams
- Lab : Sharing Team Knowledge using Azure Project Wikis

# DESIGN AND IMPLEMENT MICROSOFT DEVOPS SOLUTIONS (AZ-400)

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VIRTUAL CLASSROOM LIVE

\$2,595 USD

4 Day

## Virtual Classroom Live Outline

### AZ-400: Development for enterprise DevOps

- Introduction to DevOps
- Plan Agile with GitHub Projects and Azure Boards
- Design and implement branch strategies and workflows
- Collaborate with pull requests in Azure Repos
- Explore Git hooks
- Plan foster inner source
- Manage and configure repositories
- Identify technical debt

### AZ-400: Implement CI with Azure Pipelines and GitHub Actions

- Explore Azure Pipelines
- Manage Azure Pipeline agents and pools
- Describe pipelines and concurrency
- Design and implement a pipeline strategy
- Integrate with Azure Pipelines
- Introduction to GitHub Actions
- Learn continuous integration with GitHub Actions
- Design a container build strategy

### AZ-400: Design and implement a release strategy

- Create a release pipeline
- Explore release strategy recommendations
- Configure and Provision Environments
- Manage and modularize tasks and templates
- Automate inspection of health

### AZ-400: Implement a secure continuous deployment using Azure Pipelines

- Introduction to deployment patterns
- Implement blue-green deployment and feature toggles
- Implement canary releases and dark launching
- Implement A/B testing and progressive exposure deployment
- Integrate with identity management systems
- Manage application configuration data

#### AZ-400: Manage infrastructure as code using Azure and DSC

- Explore infrastructure as code and configuration management
- Create Azure resources using Azure Resource Manager templates
- Create Azure resources by using Azure CLI
- Explore Azure Automation with DevOps
- Implement Desired State Configuration (DSC)
- Implement Bicep

#### AZ-400: Implement security and validate code bases for compliance

- Introduction to Secure DevOps
- Implement open-source software
- Software Composition Analysis
- Security Monitoring and Governance

#### AZ-400: Design and implement a dependency management strategy

- Explore package dependencies
- Understand package management
- Migrate consolidate and secure artifacts
- Implement a versioning strategy
- Introduction to GitHub Packages

#### AZ-400: Implement continuous feedback

- Implement tools to track usage and flow
- Develop monitor and status dashboards
- Share knowledge within teams
- Design processes to automate application analytics
- Manage alerts, blameless retrospectives and a just culture

#### Virtual Classroom Live Labs

- Lab : Agile Planning and Portfolio Management with Azure Boards
- Lab : Version Controlling with Git in Azure Repos
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Feb 17 - 20, 2026 | 9:00 AM - 5:00 PM EST

Apr 6 - 9, 2026 | 9:00 AM - 5:00 PM EDT

Jun 22 - 25, 2026 | 9:00 AM - 5:00 PM EDT

Aug 31 - Sep 3, 2026 | 9:00 AM - 5:00 PM EDT





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PRIVATE GROUP TRAINING

4 Day

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