# IMPLEMENTING AZURE DEVOPS PIPELINES

3 Days Classroom 3 Days Live Online

Individual: \$2550.00

Group: \$2450.00

GSA: \$2440.00

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# **COURSE OVERVIEW**

In this hands-on boot camp, you will build a truly practical and useful End-to-End DevOps Pipeline to create, test and deploy Chef Cookbooks through CI/CD (Continuous Integration / Continuous Deployment) using Azure Repos and Azure Pipelines. Guided by an experienced DevOps practitioner, you will automate an entire End-To-End CI/CD (Continuous Integration/Continuous Deployment) Pipeline using Azure Repos, Chef and Azure Pipelines and maintain code using Git and Azure Repos.

You will also create, test and deploy Chef cookbooks through an Azure Pipelines CI/CD pipeline, including Code Linting, and Testing with Inspec and Test Kitchen.

## **COURSE OUTLINE**

### Part 1: Course Introduction

- 1. Azure Repos-Chef-Azure Pipelines: A DevOps Pipeline
- 2. Course Purpose
- 3. Agenda
- 4. Introductions
- 5. Lab Environments

## Part 2: Technology Overview

- 1. Git Source Control Management
- 2. Chef Configuration Management
- 3. Linting & Inspec Cookbook Testing
- Azure Pipelines Continuous Integration
- 5. An End-To-End CI/CD
  (Continuous Integration/
  Continuous Deployment) Pipeline

# Part 3: Git/Azure Repos

- 1. Git purpose and Workflow
- 2. Git configuration
- 3. Getting help with git
- 4. Basic git commands
- 5. Remote, status, add, commit, push, log, diff
- 6. Creating and checking out branches
- 7. Creating repository in Azure Repo
- 8. Accessing private repos with SSH keys
- 9. Pull requests
- 10. Merging and deleting branches

### Part 4: Chef

- 1. Purpose and Use cases
- 2. Architecture and call flow
- 3. Resources, recipes & cookbooks
- 4. Policyfiles
- 5. Linting: Cookstyle and Foodcritic
- 6. Wrapper Cookbooks
- 7. Integration testing Inspec and Test Kitchen
- 8. Chef Infra Server as centralized management
- 9. Creating a local chef-repo
- 10. Bootstrapping Chef-managed nodes

## Part 5: Azure Pipelines

- CI/CD = Continuous Integration / Continuous Deployment
- 2. Purpose
- 3. Projects
- 4. Jobs
- 5. YAML scripting CI/CD as Code
- 6. Managing credentials and secret files
- 7. Integrating with Source Control Management: Azure Repos
- 8. Triggers: Scheduled Polling and Webhooks
- 9. Automated cookbook linting: Foodcritic and Cookstyle
- 10. Automated cookbook testing with Test Kitchen

See website for full outline

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