

AZ-2008: DevOps Foundations: The Core Principles and Practices

Duration: 8Hrs

AZ-2008: DevOps Foundations: The Core Principles and Practices training is designed to introduce participants to the fundamental concepts and practices of DevOps. It covers the key principles that underpin DevOps, including continuous integration, continuous delivery, and the importance of collaboration between development and operations teams. In AZ-2008 training learners will gain an understanding of how DevOps practices can streamline the software development lifecycle, improve efficiency, and enhance product quality.

Objectives • Discover DevOps • Plan with DevOps • Develop with DevOps • Deliver with DevOps • Operate with DevOps

Target Audience • DevOps Engineer • Security Engineer • Azure Administrator • Technical Architect

Course Outline

1) Discover DevOps

- Describe the DevOps approach • Explore best practices for fostering DevOps culture • Identify DevOps goals and benefits • Understand the DevOps application lifecycle

2) Develop with DevOps

- Define source control and version control • Describe how to manage source control with Git • Describe how to manage source control with GitHub Flow • Define the concept of continuous integration • Explore DevOps shiftleft testing scenarios • Explore DevOps shiftleft security scenarios

3) Deliver with DevOps

- Define the concept of continuous delivery • Describe the concept and implementation methods of IaC • Review the progressive exposure techniques and deployment practices •

Explore DevOps shiftright testing scenarios • Describe how to implement continuous delivery with GitHub Actions

4) Operate with DevOps

• Explore the concepts of operational excellence • Review infrastructure and application monitoring solutions • Review infrastructure and application security monitoring solutions • Describe the correlation between SRE and DevOps

5) Plan with DevOps

• Describe the components of and the path to a DevOps culture • Define the frameworks and methods of the Agile methodology • Implement DevOps practices • Use GitHub to plan a project