

# Designing and Implementing Platform Engineering (AZ-2010)

## Description

The AZ-2010 course offers a comprehensive approach to designing and implementing platform engineering within modern enterprises. With the rapid evolution of digital technology, it is essential to build infrastructures that are robust, secure, and aligned with business needs. This training helps you develop strategic skills to transform your organization.

Through a structured program centered around Azure and Azure DevOps concepts, you will learn to design scalable and secure platforms. You will be able to implement high-performance architectures by combining innovation and operational excellence. This course relies on practical modules to strengthen both your technical and methodological skills.

## A training aligned with the needs of modern businesses

Mastering platform engineering also means fostering collaboration between teams and enhancing the developer experience. With GitHub and the integration of DevOps best practices, you will learn to create solutions that evolve in line with market demands. This course will enable you to build reliable, modern, and future-ready platforms.

## Course Content

### Module 1: Fundamentals of Platform Engineering

- The role of platform engineering in modern enterprises
- Fundamental principles of platform design
- Platform engineering capability model
- Core aspects of platform implementation

### Module 2: Designing Secure and Scalable Platform Architectures

- Basic principles of designing secure and scalable platforms
- Security considerations in platform architecture
- Scaling platform architectures for growth and adaptability
- Automation and resilience for modern platforms

### Module 3: Implementing Developer Self-Service

- Introduction to developer self-service
- Developer self-service platform architecture
- Governance and security in self-service workflows
- Developer coding environments
- Automation and self-service tools
- Monitoring and auditing developer activities
- Implementing Microsoft Dev Box

### Module 4: Observability and Continuous Improvement

- The importance of observability in modern platforms

- Building observability into platform architecture
- Metrics, monitoring, and alerting
- Automating incident detection and resolution
- Continuous improvement through feedback loops
- Implementing Real-Time Monitoring with Azure Monitor

## **Module 5: Strategic Platform Roadmap**

- Understanding the strategic importance of platform engineering
- Developing a scalable platform architecture
- Ensuring platform sustainability
- Continuous improvement and innovation management
- Developing and executing the roadmap
- Risk management in platform engineering
- Communicating the roadmap to stakeholders
- Implementing a Self-Service Infrastructure with Bicep

## **Lab / Exercises**

- This course provides you with exclusive access to the official Microsoft lab, enabling you to practice your skills in a professional environment.

## **Documentation**

- Access to Microsoft Learn, Microsoft's online learning platform, offering interactive resources and educational content to deepen your knowledge and develop your technical skills.

## **Participant profiles**

- Cloud Administrator
- DevOps Engineer
- Software Developer
- Solutions Architect
- Network Engineer
- Cybersecurity Engineer
- Tech Startup Founder
- AI Engineer

## **Prerequisites**

- Master the concepts of cloud computing (PaaS, SaaS, IaaS)
- Have knowledge of Azure administration or development
- Understand the fundamentals of DevOps and version control

## **Objectives**

- Understand the fundamentals of platform engineering
- Design secure and scalable platform architectures
- Implement self-service solutions for developers
- Optimize platform observability and drive continuous improvement
- Plan and develop a strategic roadmap for platforms
- Promote innovation and digital transformation
- Integrate automation to enhance system resilience

## **Description**

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**Niveau**

Avancé

**Classroom Registration Price (CHF)**

900

**Virtual Classroom Registration Price (CHF)**

850

**Duration (in Days)**

1

**Reference**

AZ-2010