

## MAZR-52 - MOC AZ-400T00 - DESIGNING AND IMPLEMENTING MICROSOFT DEVOPS SOLUTIONS

Categoria: Azure

## INFORMAZIONI SUL CORSO











Durata: 4 Giorni

Categoria: Azure Qualifica Istruttore: Microsoft Certified Trainer Dedicato a: Professionista IT Produttore: Microsoft

**OBIETTIVI** 

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.

## **PREREQUISITI**

Successful learners will have prior knowledge and understanding of:

- -Cloud computing concepts, including an understanding of PaaS, SaaS, and IaaS implementations.
- -Both Azure administration and Azure development with proven expertise in at least one of these areas.
- -Version control, Agile software development, and core software development principles. It would be helpful to have experience in an organization that delivers software.

Prerequisite courses (or equivalent knowledge and hands-on experience):

-Course: AZ-104: Microsoft Azure Administrator

-Course: AZ-204: Developing Solutions for Microsoft Azure

## **CONTENUTI**

Introduction to DevOps

Choose the right project

Describe team structures

Choose the DevOps tools

Plan Agile with GitHub Projects and Azure Boards

Introduction to source control



Describe types of source control systems
Work with Azure Repos and GitHub
Structure your Git Repo
Manage Git branches and workflows
Collaborate with pull requests in Azure Repos
Identify technical debt
Explore Git hooks
Plan foster inner source
Manage Git repositories
Explore Azure Pipelines
Manage Azure Pipeline agents and pools
Describe pipelines and concurrency
Explore continuous integration
Implement a pipeline strategy
Integrate with Azure Pipelines
Introduction to GitHub Actions
Learn continuous integration with GitHub Actions
Design a container build strategy
Introduction to continuous delivery
Create a release pipeline
Explore release recommendations
Provision and test environments
Manage and modularize tasks and templates
Automate inspection of health
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 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 Introduction to Secure DevOps Implement open-source software **Software Composition Analysis** Static analyzers **OWASP and Dynamic Analyzers** Security Monitoring and Governance Explore package dependencies Understand package management Migrate consolidating and secure artifacts Implement a versioning strategy Introduction to GitHub Packages 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



**Esame:** AZ-400 - Designing and Implementing Microsoft DevOps Solutions **Materiale didattico:** Materiale didattico ufficiale Microsoft in formato digitale

Costo materiale didattico: incluso nel prezzo del corso a Calendario

Natura del corso: Operativo (previsti lab su PC)