

Szkolenie: Google Cloud Getting Started with Terraform for Google Cloud



DOSTĘPNE TERMINY

2026-06-30 | 1 dzień | Warszawa / Wirtualna sala
2026-07-17 | 1 dzień | Kraków / Wirtualna sala
2026-08-21 | 1 dzień | Warszawa / Wirtualna sala
2026-09-18 | 1 dzień | Kraków / Wirtualna sala
2026-10-16 | 1 dzień | Warszawa / Wirtualna sala
2026-11-20 | 1 dzień | Kraków / Wirtualna sala
2026-12-11 | 1 dzień | Warszawa / Wirtualna sala

Cel szkolenia:

This course provides an introduction to using Terraform for Google Cloud. It enables learners to describe how Terraform can be used to implement infrastructure as a code and to apply some of its key features and functionalities to create and manage Google Cloud infrastructure. Learners will get hands-on practice building Google Cloud resources using Terraform.

What you'll learn

- Define the business need for infrastructure as code and the benefits of using it in your environment.
- Explain the features and functionalities of Terraform.
- Use Terraform resources, variables, and output values to create Google Cloud infrastructure resources.
- Use Terraform modules to build reusable configurations.
- Explain Terraform state and its importance.

Audience

Cloud engineers, DevOps engineers, and individuals who want to start using Terraform to automate infrastructure provisioning with a focus on Google Cloud Platform

Plan szkolenia:

- Module 1 - Introduction to Terraform for Google Cloud
 - Topics
 - Introduction to IaC
 - What is infrastructure as code (IaC)?
 - Problems IaC can solve
 - Benefits of IaC
 - Provisioning versus configuration
 - Imperative versus declarative approach
 - Introduction to Terraform
 - Terraform overview
 - Terraform features
 - IaC configuration workflow
 - Terraform use cases
 - Using Terraform
 - How to use Terraform
 - Running Terraform in production
 - Installing Terraform
 - Authentication for Google Cloud
 - Objectives
 - Define infrastructure as code.
 - Explain the features and benefits of using Terraform.
 - Explain the use case of Terraform for Google Cloud.
 - Describe how to use Terraform for Google Cloud.
 - Activities
 - 1 quiz
- Module 2 - Terms and concepts
 - Topics
 - The Author phase
 - Terraform Directory structure
 - Introduction to HCL syntax
 - Resources
 - Variables
 - State
 - Modules
 - Terraform commands
 - terraform init
 - terraform plan

- terraform apply
- terraform fmt
- terraform destroy
- Terraform Validator tool
 - Introduction
 - Why use the Terraform Validator tool
 - Validation workflow
 - Terraform Validator use cases
- Objectives
 - Explain the Terraform workflow.
 - Create basic configuration files within Terraform.
 - Explain the purpose of a few Terraform commands.
 - Describe the Terraform Validator tool.
 - Create, update, and destroy Google Cloud resources using Terraform.
- Activities
 - 1 lab
 - 1 quiz
- Module 3 - Writing Infrastructure Code for Google Cloud
 - Topics
 - Introduction to Resources
 - Resources overview
 - Syntax
 - Example
 - Refer a resource attribute
 - Considerations to define a resource block
 - Meta-arguments for resources
 - Resource dependencies
 - Implicit dependency
 - Explicit dependency
 - Introduction to Variables
 - Overview
 - Syntax to declare a variable
 - Syntax to reference and assign a value to a variable
 - Variables best practices
 - Introduction to output values
 - Output values overview

- Best practices
- Terraform Registry and CFT
 - Introduction to Terraform Registry
 - Introduction to CFT
- Objectives
 - Declare the resources within Terraform.
 - Explain implicit and explicit resource dependencies.
 - Use variables and output values within the root configuration.
 - Explain Terraform Registry and Cloud Foundation Toolkit.
- Activities
 - 1 lab
 - 1 quiz
- Module 4 - Organizing and Reusing Configuration with Terraform Modules
 - Topics
 - Introduction to modules:
 - Why are modules needed
 - What is a module?
 - Example
 - Reusing configurations by using modules
 - Module sources
 - Calling a module into the source configuration
 - Using variables to parameterize your configuration
 - Pass resource attributes using output variables
 - Module use cases, benefits, and best practices
 - Objectives
 - Define Terraform modules.
 - Use modules to reuse configurations.
 - Use modules from the public registry.
 - Use input variables to parameterize configurations.
 - Use output values to access resource attributes outside the module.
 - Activities
 - 1 lab
 - 1 quiz
- Module 5 - Introduction to Terraform State
 - Topics
 - Introduction to Terraform state

- How information is stored in a Terraform state file
- Ways to save a state file
- Storing a state file in a Cloud Storage bucket
 - Issues when storing the Terraform state locally
 - Benefits of storing a state file in a Cloud Storage bucket
 - Process of storing a Terraform state file remotely in a Cloud Storage bucket
- Terraform state best practices
- Objectives
 - Define Terraform state.
 - List the benefits of storing the state file remotely.
 - Explain how to store the Terraform state in a Cloud Storage bucket.
 - Explain Terraform state best practices.
- Activities
 - 1 lab
 - 1 quiz

Wymagania:

To get the most out of this course, participants should:

- Complete Google Cloud Fundamentals: Core Infrastructure
- Have basic programming skills and familiarity with using CLI
- Have general familiarity with Google Cloud

Poziom trudności



Certyfikaty:

The participants will obtain certificates signed by Google Cloud Platform.

Prowadzący:

Authorized Google Cloud Platform Trainer.