Generative AI with ChatGPT

Audience course GitLab CI/CD
The course GitLab CI/CD is intended for DevOps engineers, Software Developers and QA engineers who want to learn pipelining with GitLab.

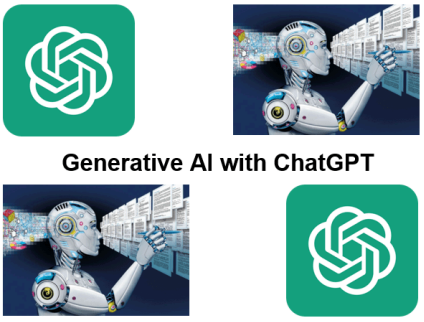
Prerequisites GitLab CI/CD Course
To participate in the course, basic knowledge of Git, version control and software workflows is required. Familiarity with containers is useful.

Realization training GitLab CI/CD
The course is conducted under guidance of the trainer and theory and practice are interchanged. Real world case studies are used for explanations.

GitLab CI/CD Certificate
After successfully completing the course, participants will receive a certificate of participation in GitLab CI/CD.

Duration: 2 days **Price: € 1499**

Open Schedule



Content Course Generative AI with ChatGPT

This course is ideal for anyone looking to implement GitLab CI/CD pipelines in their projects and streamline their DevOps workflows.

Course Overview

This 2-day hands-on course provides an in-depth understanding of GitLab CI/CD, a powerful tool for automating software builds, testing, and deployments. Participants will learn how to set up, configure, and optimize CI/CD pipelines in GitLab to enhance software delivery efficiency.

By the end of the course, participants will be able to:

• Understand GitLab CI/CD architecture and concepts

• Create CI/CD pipelines using .gitlab-ci.yml

• Implement continuous integration and delivery best practices

• Automate builds, testing, and deployments

• Integrate GitLab CI/CD with Docker, Kubernetes, and cloud platforms

• Implement security and compliance checks in pipelines

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Locations
Houten, Amsterdam, Rotterdam, Eindhoven, Zwolle, Online

Modules Course Generative AI with ChatGPT

Module 1: Introduction to GitLab CI/CD	Module 2: Writing GitLab CI/CD Pipelines	Module 3: Automating Builds and Testing
Overview of GitLab as a DevOps platform Introduction to Continuous Integration & Continuous Deployment (CI/CD) Understanding GitLab runners and jobs Key components: Stages, Jobs, Artifacts, Caching Setting up GitLab runners (shared vs. specific) Hands-on Lab: Setting up a GitLab repository with CI/CD	Introduction to .gitlab-ci.yml file structure Defining jobs, stages, and dependencies Running jobs in parallel and sequential execution Using variables, artifacts, and caching Best practices for writing clean and maintainable pipelines Hands-on Lab: Creating a simple multi-stage CI/CD pipeline	Automating builds for different programming languages Running unit tests, integration tests, and linting in CI/CD Handling failures and notifications Code Quality & Static Analysis tools integration Hands-on Lab: Implementing build and test automation in a pipeline
Module 4: Debugging and Troubleshooting Pipelines	**Module 5: Deployments with GitLab CI/CD**	**Module 6: Working with Docker in GitLab CI/CD**
Understanding GitLab logs and artifacts Common CI/CD errors and fixes Using retry strategies and conditional execution Hands-on Exercise: Debugging a broken pipeline	Introduction to deployment strategies Using environments and deployment jobs Blue-Green & Canary deployments Deploying to Docker, Kubernetes, and cloud providers Hands-on Lab: Automating deployments to a cloud environment	Using Docker images in pipelines Building and pushing Docker images to GitLab Container Registry Running jobs inside Docker containers Hands-on Lab: Building and deploying Docker images
Module 7: Security, Compliance, and Monitoring	**Module 8: Scaling GitLab CI/CD in Enterprises**	
Implementing security scans (SAST, DAST, dependency scanning) Managing secrets and environment variables securely GitLab audit logs and monitoring CI/CD activity Hands-on Lab: Adding security checks to a GitLab pipeline	Best practices for managing large-scale pipelines Running multiple parallel jobs efficiently Optimizing performance with caching and distributed runners Real-world case studies Final Project: Building an end-to-end CI/CD pipeline for a real-world application	