

## **DevOps Fundamentals**

#### Audience Course DevOps Fundamentals

The course DevOps Fundamentals is intended for anyone involved in IT development, IT operations or services and who wants to learn what is meant by a DevOps way of working.

#### **Prerequisites Course DevOps Fundamentals**

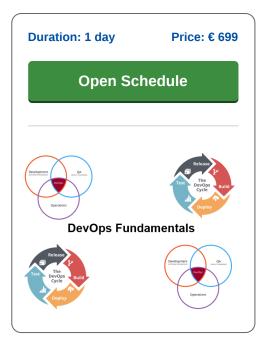
Familiarity with the Agile Development methodology and Scrum is beneficial for the understanding, but is not strictly necessary.

#### **Realization Course DevOps Fundamentals**

The concepts are discussed through interactive sessions, exercises and short workshops. Course times are from 9.30 to 16.30.

#### **Certification DevOps Fundamentals**

After successful completion of the course the participants receive an official certificate DevOps Fundamentals.



### **Content Course DevOps Fundamentals**

In the course DevOps Fundamentals participants learn the benefits of a close collaboration between Development and Operations. By using DevOps organizations can enhance the speed of the production and deployment of software applications and services and make them better. DevOps also includes the automation of code deployment, avoiding human error and making the process reproducible.

#### **DevOps Background**

The course starts with an overview of the circumstances that led to the introduction of DevOps. It is discussed how in the time before DevOps development, testing and deployment activities were isolated activities with their own planning and how a lot of time was lost as a result. The relationship between DevOps and the Agile Development methodology is also treated.

#### **Ownership and Accountability**

Subsequently attention is paid how these activities are coordinated in DevOps, resulting in a faster turn around time. The importance of ownership and accountability for enhancing quality in DevOps is also emphasized. And the role of automating tests and deployment is also discussed.

#### **Development Phases**

The different phases of the development and deployment process and how they are coordinated in DevOps are treated. Attention is paid to the management of planning, development, testing, release and deployment.

#### **DevOps Culture**

And not only the technique is part of the course. The DevOps culture, the importance of hard and soft skills, the various roles and responsibilities, troubleshooting and problem solving are also part of the course program.

#### Tooling

Finally attention is paid to the tooling that can be used in DevOps processes such as Chef, Puppet or Ansible for configuration management, Nagios for monitoring and Jenkins, Bamboo or TeamCity for continuous integration.

info@spiraltrain.nl www.spiraltrain.nl Tel.: +31 (0) 30 – 737 0661 Locations Houten, Amsterdam, Rotterdam, Eindhoven, Zwolle, Online



# **Modules Course DevOps Fundamentals**

Module 1 : DevOps Intro	Module 2 : Architecture Features	Module 3 : DevOps Lifecycle
What is DevOps?	Collaboration	Continuous DevOps
Development and Operations	Work as One Team	Planning
Faster Deployment	Strengthening Accountability	Get Teams in Sync
Automated Deployment	Strengthening Ownership	Development Stage
DevOps Roots	End-To-End Responsibility	Testing by QA team
Agile Methodology	Automation	Continuous Integration
Versioning	Automated Tests	Release New Version
Time to Market	Automated Deployment	Release Management
Reproducibility	Continuous Improvement	Deployment Process
Quality Assurance	Integration	System Monitoring
Manageable Chunks	Configuration Management	Team Collaboration
Module 4 : DevOps Engineers	Module 5 : DevOps Automation Tools	
DevOps Culture	Infrastructure Automation	
System Operators	AWS and Azure	
Software Developers	Configuration Management	
Production IT Staff	Chef, Puppet or Ansible	
Hard and Soft Skills	Monitoring with Nagios	
Understanding Lifecycle	Deployment Automation	
Engineer Roles	Jenkins, Bamboo, Team City	
Engineer Deeneneibilitiee	Log Management with Splunk	
Engineer Responsibilities	Log Management with Splunk	
System Troubleshooting	Performance Management	