

# DevOps Engineering on AWS with JAM – Intensive Training («AWSS2J»)

This course prepares you to become a AWS Certified DevOps Engineer (Professional Level). You will learn the core principles of the DevOps methodology and examines a number of use cases applicable to enterprise development scenarios.

**Duration:** 4 days

**Price:** 3'600.–

**Course documents:** Digital original AWS course books

**Vendor code:** AWSS02

## Content

### Day 1

- What is DevOps?
- Infrastructure as Code, Part 1: Design and Security
- Infrastructure as Code, Part 2: CloudFormation and Configuration Management

### Day 2

- Continuous Integration on AWS
- Continuous Deployment on AWS
- Deploying Applications on AWS, Part 1

### Day 3

- Deploying Applications on AWS, Part 2
- Continuous Integration and Delivery Pipelines on AWS
- Performance-tuning your deployments
- Administering and automating your infrastructure

### Day 4: AWS Jam Day

- Solve real-world challenges together as a team in a safe AWS environment, guided by your instructor
- Compete against other teams to win the challenge with your colleagues and put your AWS skills into action
- All challenges are based on the scope of the course and will support your learning curve in a very effective way

- Assimilating and leveraging the AWS shared security responsibility model
- Architecting and building AWS application infrastructures that are protected against the most common security threats
- Protecting data at rest and in transit with encryption
- Applying security checks and analyses in an automated and reproducible manner
- Configuring authentication for resources and applications in the AWS Cloud
- Gaining insight into events by capturing, monitoring, processing, and analyzing logs
- Identifying and mitigating incoming threats against applications and data
- Performing security assessments to ensure that common vulnerabilities are patched and security best practices are applied

**AWS JAM Day will be featured on the final, 4th day of this course**, as a gamified event where you will be split into teams to compete in a series of best practice challenges based on concepts covered in the course. In addition to the hands-on labs of the ILT courses, an additional day of curated and instructor-facilitated challenges allows learners to use AWS Jam to address real-world scenarios, representing common operational and troubleshooting tasks relevant for your job role. You will be able to apply your knowledge in a safe and real AWS environment and score points if you solve the challenge correctly. The aim of an AWS Jam is to develop, improve, and validate your skills in the AWS cloud and get ready to use your practical skills when you are back on your daily job.

## Methodology & didactics

This course comes in 4 instructor-led full day sessions with the instructor supervising the participants live. Each course consists of theory parts with live demos and practical lab exercises. The course can be attended either on-site at a physical Digicomp location or virtually via Zoom. Please also refer to each course's description for specific details regarding the prerequisites and the covered topics.

The last day of the course is an *AWS JAM*: Transform your theoretical skills into practical doing by solving real-world problems in a sandbox environment.

## Target audience

This course is intended for the following job roles:

- CloudOps
- DevOps

**Why should you attend this specific course?** What are my benefits from taking this course? The **Voice of the Instructor answers these questions**. We have asked our instructor team to write a short text about WHY this course is very relevant for the respective job roles and what you can expect from attending the course. You can find this section in the course description under the «*Additional Information*» section.

## Requirements

We recommend that attendees of this course have the following prerequisites:

- You need practical knowledge of at least one advanced programming language (C#, Java, PHP, Ruby, Python, etc.), as well as advanced novice Linux or Windows command line management skills

and have attended the following course (or have equivalent knowledge):

- [Cloud Operations on AWS – Intensive Training \(«AWSS01»\)](#)

This course is currently only supported by the Chrome and Firefox browsers. Please make sure that your device has one of these browsers installed or that you can install them on it.

### Voice of the Instructor

Welcome to the exciting world of AWS DevOps! This transformative journey starts by immersing you into the concept of Infrastructure as Code (IaC) with AWS CloudFormation. We'll extend that knowledge with AWS CDK and AWS SAM in later chapters. These powerful tools expedite infrastructure deployment and management through reliable, repeatable processes, laying a strong foundation for your DevOps endeavors. Building on that, we venture into AWS CodeSuite, including AWS CodeCommit, CodeBuild, CodeDeploy, CodePipeline, and CodeStar. This suite forms the backbone of your DevOps workflow, fueling efficient code compilation, automated deployments, and seamless integration and delivery processes.

From the beginning of the course, we will be discussing the world of microservices and containerization. You'll unravel the role of microservices in modern architectural practices and how they solve complex business challenges with the help of DevOps methodologies. Complementing this knowledge, you'll familiarize yourself with containerization using Amazon Elastic Container Service (ECS) and Amazon Elastic Kubernetes Service (EKS), understanding their profound impact on software development practices and DevOps methodologies.

Finally, we'll hone in on security, the bedrock of all operations in AWS. We will demonstrate the importance of AWS IAM, helping you understand its vital role in controlling access to AWS resources. Complementing this, we will spend some time understanding AWS Config and AWS CloudTrail, tools that enhance your ability to audit, monitor, and automate your resource compliance.

In essence, this course is not merely about learning tools and practices. It's about shifting the way you think about software development and operations. It's about emboldening you to create faster, better, and more secure applications through the power of automation, collaboration, and a culture of continuous improvement. Welcome aboard! We, the instructors, are eager to spend three exciting days with you, helping you get the most out of this course.

### Any questions?

We are happy to advise you on +41 44 447 21 21 or [info@digicomp.ch](mailto:info@digicomp.ch). You can find detailed information about dates on [www.digicomp.ch/courses-it-provider/amazon-web-services-aws/aws-devops/course-devops-engineering-on-aws-with-jam-intensive-training](https://www.digicomp.ch/courses-it-provider/amazon-web-services-aws/aws-devops/course-devops-engineering-on-aws-with-jam-intensive-training)