

## Developing on AWS with JAM – Intensive Training («AWSD1J»)

This course prepares you to become a AWS Certified Developer (Associate Level). You will learn in-depth knowledge about how to interact, using code and covers key concepts, best practices and troubleshooting tips.

**Duration:** 4 days

**Price:** 2'900.–

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

**Vendor code:** AWSD01

### Content

#### Day 1: Building the Foundation

- Introduction to Developing on AWS
- Choosing a Data Store
- Developing Storage Solutions with Amazon S3
- Developing Flexible NoSQL Solutions with Amazon DynamoDB

#### Day 2: Connecting Applications and Data with Event-Driven Processing

- Working with Events
- Developing Event-Driven Solutions with Amazon Kinesis Stream
- Developing Event-Driven Solutions with Amazon SWF, Amazon SQS, and Amazon SNS
- Developing Event-Driven Solutions with AWS Lambda

#### Day 3: Developing and Deploying Secure, Scalable Applications

- Developing Secure Applications
- Caching Information for Scalability
- Monitoring Your Application and AWS Resources with Amazon CloudWatch
- Deploying Applications with AWS Elastic Beanstalk and AWS CloudFormation

#### 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

- Setting up the AWS SDK and developer credentials for Java, C#/.NET, Python, and JavaScript
- Interacting with AWS services and develop solutions by using the AWS SDK
- Using AWS Identity and Access Management (IAM) for service authentication
- Using Amazon Simple Storage Service (Amazon S3) and Amazon DynamoDB as data stores
- Integrating applications and data by using AWS Lambda, Amazon API Gateway, Amazon Simple Queue Service (Amazon SQS), Amazon Simple Notification Service (Amazon SNS), and AWS Step Functions
- Using Web Identity Framework and Amazon Cognito for user authentication
- Using Amazon ElastiCache to improve application scalability
- Using containers in the development process
- Leveraging the CI/CD pipeline to deploy applications on AWS

**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:

- Developer
- 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:

- Students should have in-depth knowledge of at least one high-level programming language

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

- [Architecting on AWS with Best Practice – Intensive Training \(«AWSA10»\)](#)

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

«Developing on AWS» is one of three associate-level AWS courses. This course has been meticulously designed as the first step in an AWS journey tailored for developers. Given that this is an associate-level course, our main focus will be on understanding the fundamental architecture of AWS, specifically from a developer's viewpoint. On AWS, everything is code. Each command you issue within AWS, targeting one of the thousands of different resources, is actually an API call, neatly wrapped behind various interfaces. During this course, we'll begin to explore one of them: the AWS SDK. But it won't be just theoretical learning - you'll have the opportunity to put the topics we cover into practice during hands-on labs.

Our aim is to equip you with enough information, particularly from a conceptual perspective, to instill confidence in your understanding of the programmatic relationship within the AWS API. Although it's impossible to cover every aspect of developing and building on AWS in a three-day course, we are confident that you'll acquire enough knowledge to facilitate and expedite your future learning journey. As instructors, we are seasoned developers ourselves, and as trainers, we will be your guides into the world of AWS development. We will assist you in interpreting and understanding the crucial building blocks in «Developing on AWS».

AWS, as they say, comes with the "batteries included". It boasts more than 200 ready-to-use services. However, the real power in using AWS surfaces when you start comprehending the intricate relationships between individual services, especially the core ones and those that help you connect other services together to ensure they function seamlessly in any solution you can envision. This is one of three specific courses for developers on AWS. Remember, this is the first one. We are eager to invite you to join us and look forward to meeting you in the classroom. For us instructors, teaching AWS Development is never boring or dull. We sincerely hope that your experience as a learner will be equally engaging and enjoyable, and that you will relish spending three days with us learning the basics of AWS development.

### 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-digital-transformation-technologies/cloud/amazon-web-services-aws/aws-developer/course-developing-on-aws-with-jam-intensive-training](https://www.digicomp.ch/courses-digital-transformation-technologies/cloud/amazon-web-services-aws/aws-developer/course-developing-on-aws-with-jam-intensive-training)