

## Architecting on AWS (AWSA)

<b>Kosten:</b>	€ 1.995,00,- excl. BTW
<b>Duur:</b>	3 days
<b>Max Deelnemers:</b>	16

### Course overview

This course focuses on the fundamentals of building IT infrastructure on the AWS platform. You will learn how to optimize the AWS Cloud by understanding AWS services and how they fit into cloud-based solutions. Best practices and design patterns are covered to help you architect optimal IT solutions on the AWS Cloud. Build and explore a variety of infrastructures through guided discussions and hands-on activity.

### Who should attend

This course is intended for:

- Solutions Architects
- Solution Design Engineers
- Anyone who needs to understand the scope of cloud architectures

### Certifications

This course is part of the following Certifications:

- **AWS Certified Solutions Architect – Associate (ACSAA)**
- **AWS Certified Security - Specialty (ACSS)**

### Prerequisites

We recommend that attendees of this course have:

- Taken the **AWS Cloud Practitioner Essentials (CP-ESS)**
- Working knowledge of distributed systems and multi-tier architectures
- Familiarity with general networking and cloud computing concepts

## Course Objectives

This course is designed to teach you how to:

- Make architectural decisions based on AWS architectural principles and best practices
- Leverage AWS services to make your infrastructure scalable, reliable, and highly available
- Leverage AWS Managed Services to enable greater flexibility and resiliency in an infrastructure
- Make an infrastructure based on AWS more efficient to increase performance and reduce costs
- Use the Well-Architected Framework to improve architectures with AWS solutions

## Follow On Courses

- Advanced Architecting on AWS (**AWSAA**)

## Other

Class times are from 9:00 AM to 4:30 PM

## Architecting on AWS (AWSA) – Course Content

### Day One

#### Module 1: Introduction

- The Well-Architected Framework
- AWS Global Infrastructure

#### Module 2: The simplest architectures

- Amazon Simple Storage Service (Amazon S3)
- Amazon S3 Glacier
- Choosing AWS Regions for your architectures
- Hands-on lab: Hosting a Static Website

#### Module 3: Adding a compute layer

- Amazon Elastic Compute Cloud (Amazon EC2)
- Amazon Machine Images (AMIs)
- Amazon Elastic Block Storage (Amazon EBS)
- Amazon Elastic File System (Amazon EFS)
- Amazon FSx

#### Module 4: Adding a database layer

- Database layer considerations
- Amazon Relational Database Service (Amazon RDS)
- Amazon DynamoDB
- AWS Database Migration Service (AWS DMS)
- Hands-on lab: Deploying a Web Application on AWS

## **Module 5: Networking in AWS – Part 1**

- Amazon Virtual Private Cloud (Amazon VPC)
- Network security in the cloud
- Hands-on lab: Creating a VPC

## **Day Two**

## **Module 6: Networking in AWS – Part 2**

- AWS VPN connections
- AWS Direct Connect (DX)
- VPC peering
- AWS Transit Gateway
- Load balancing on AWS
- Amazon Route 53

## **Module 7: AWS Identity and Access Management (IAM)**

- Account users and AWS IAM
- Federating users
- Amazon Cognito
- AWS Organizations

## **Module 8: Elasticity, high availability, and monitoring**

- Amazon CloudWatch
- AWS CloudTrail
- Amazon EC2 Auto Scaling
- Scaling your databases
- Hands-on lab: Creating a highly available environment

## **Module 9: Automation**

- AWS CloudFormation
- AWS Systems Manager
- AWS OpsWorks
- AWS Elastic Beanstalk
- Hands-on lab: Automating infrastructure deployment with AWS CloudFormation

## **Day Three**

## **Module 10: Caching**

- Caching on AWS with Amazon CloudFront
- Session management
- Amazon DynamoDB Accelerator (DAX)

- Amazon ElastiCache

#### **Module 11: Building decoupled architectures**

- Amazon Simple Queue Service (Amazon SQS)
- Amazon Simple Notification Service (Amazon SNS)

#### **Module 12: Microservices and serverless architectures**

- Amazon Elastic Container Service (Amazon ECS)
- AWS Fargate
- AWS Lambda
- Amazon API Gateway
- AWS Step Functions
- Hands-on lab: Implementing a serverless architecture with AWS Managed Services

#### **Module 13: RTO/RPO and backup recovery setup**

- Disaster planning
- Data replication
- Recovery strategies
- AWS Storage Gateway

#### **Module 14: Optimization and review**

- Best practices for optimization
- Review questions

#### ***Available as online Course***

#### **Price of the course Power BI Fundamentals**

**Price per participant** € 1.995,00 excl. VAT

**Max. participants:** 16

#### **No additional costs**

The mentioned course rates are per person, excluding 21% VAT (VAT number is stated on the invoice), including all current teaching materials, a reference work (PDF) and a certificate of participation. So there are no additional costs afterwards.

#### ***Tax-deductible***

**The government stimulates knowledge and skills in the Netherlands. That is why SignOn's courses are (partially) tax-deductible. How much you can deduct depends on your situation. Do you want to know more? Check the website of the Tax Authorities.**

#### ***Employers***

As an employer you can deduct the full training costs for employees as operating costs. This applies to the training itself, but also to other costs such as books, registration fees,

administrative costs, the certificate or extra supervision. At SignOn all these costs are already included in the price.

### **Individuals**

If you take a course on your own account, it is often deductible for income tax. In this way, continuing to study is affordable. The education or course must be relevant to your current or future work. If you spend more than € 250 on compulsory costs for a relevant course or course, you may deduct a maximum of € 15,000. Check the website of the Tax Authorities.

### **In-company group rate**

If you register with a group of five or more people for a course at the company location (in-company), we can offer an attractive group rate. For information about our group rates, please contact us and request a quote via this link or call 020 – 820 83 62.

### **Want to know more?**

Do you have any questions or would you like more information? Feel free to contact us via [info@signon.nl](mailto:info@signon.nl) or call 020 – 820 83 62.

### **Delivery formats**

Choose a delivery format that suits you best. The following delivery formats are available for this course:

- **Online hybrid training**

This training will take place via Zoom with a live trainer. This is a combination of an online training and training on location.

- **Classroom live**

A face-to-face training on a location in the Netherlands. Employees from different companies are present during this classroom training. Fully catered for, including an extensive lunch.

- **In-company course**

Our in-company training is tailored to your company. The specialized trainer only deals with what is important for your company and work situation. That makes our tailor-made training very effective. We provide these training courses in Dutch, English and German. The choice for an in-company training provides an attractive discount. Depending on the number of participants, the discount can be as much as 50% compared to participation in an open training. More information or request a quote.



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better education institutes.



### **SignOn and the UWV**

SignOn ICT Training+ is a recognized training partner of the UWV. SignOn ICT Training+ is one of the few ICT educational organizations recognized by the UWV to provide training to help people return to the labor process.

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