# **Architecting on AWS**

## Description

Architecting on AWS covers the fundamentals of building IT infrastructure on AWS. The course is designed to teach solutions architects how to optimize the use of the AWS Cloud by understanding AWS services and how these services fit into cloud-based solutions. This course emphasizes AWS cloud best practices and recommended design patterns to help students think through the process of architecting optimal IT solutions on AWS. Case studies throughout the course showcase how some AWS customers have designed their infrastructures and the strategies and services they implemented.

## At a Glance

Level	Modality	Length
Intermediate	Instructor-Led, Live or Virtual Class	3 days

# **Course Objectives**

This course teaches you how to:

- Make architectural decisions based on the AWS-recommended 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 AWS-based infrastructure more efficient in order to increase performance and reduce costs.
- Use the Well-Architected Framework to improve architectures with AWS solutions.

### Intended Audience

This course is intended for:

- Solutions Architects
- Solution Design Engineers

## **Prerequisites**

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

- Courses taken: AWS Technical Essentials
- Working knowledge of distributed systems
- Familiarity with general networking concepts
- Working knowledge of multi-tier architectures
- Familiarity with cloud computing concepts

# **Delivery Method**

This course will be delivered through a mix of:

- Instructor-led Training (ILT)
- Hands-on Labs

## Course Outline

Note: course outline may vary slightly based on the regional location and/or language in which the class is delivered.

## Day 1

- Core AWS Knowledge
- Designing Your Environment
- Making Your Environment Highly Available
- Forklifting an Existing Application onto AWS

## Day 2

- Event-Driven Scaling
- Automating and Decoupling Your Infrastructure
- Designing Storage at Scale
- Hosting a New Web Application on AWS

#### Day 3

- The Four Pillars of the Well-Architected Framework
- Disaster Recovery and Failover Strategies
- Troubleshooting Your Environment
- Large-Scale Design Patterns and Case Studies