

**Module Title** : **Architecting on AWS**

**Duration** : **3 days**

## Course 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.

Because architectural solutions may differ depending on industry, type of applications, and size of business, 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.

It also presents case studies throughout the course that showcase how some AWS customers have designed their infrastructures and the strategies and services they implemented. Opportunities to build a variety of infrastructures via a guided, hands-on approach are also provided.

## Course Objectives

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

This course is designed to teach 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:

- Solution Architects
- Solution Design Engineers

## Prerequisites

We recommend that attendees of this course have:

- Attended AWS Technical Essentials or have equivalent experience
- Working knowledge of distributed systems
- Familiarity with general networking concepts
- Working knowledge of multi-tier architectures
- Familiarity with cloud computing concepts

## Hands-On Activity

This course allows you to test new skills and apply knowledge to your working environment through a variety of practical exercises

## Course Outline

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