

This course shows you the fundamentals of building IT infrastructure on the AWS platform. You learn how to optimize the AWS Cloud by understanding AWS services and how they fit into cloud-based solutions. You explore best practices and design patterns to help you architect optimal IT solutions on AWS, then build and explore a variety of infrastructures through guided, hands-on activity. You learn how to create fledgling architectures and build them into robust and adaptive solutions.

In this course, you will learn 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 AWS-based infrastructure more efficient to increase performance and reduce costs
- Use the Well Architected Framework to improve architectures with AWS solutions

## Who Should Attend?

This course is intended for solutions architects, solution design engineers, and anyone who needs to understand the scope of cloud architectures.

## Prerequisites

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

- AWS Cloud Practitioner 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 is delivered through a mix of:

- Classroom training
- Hands-on labs

## 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

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**The Well-Architected Framework**

**Networking with AWS**

**Core AWS concepts, knowledge, and services, including designing your environment and making your environment highly available**

**Event-driven scaling**

**Automation**

**Decoupling**

**Serverless designs**

**How to grow your architecture from small to extremely large**