

# DevOps Engineering on AWS

Learn via: **Classroom**

Duration: **3 Day**

<https://bilginc.com/en/training/devops-engineering-on-aws-796-training/>

## Overview

### Prerequisites

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

- Attended System Operations on AWS course
- Attended Developing on AWS course
- Working knowledge of one or more high-level programming languages (C#, Java, PHP, Ruby, Python, etc.)
- Intermediate knowledge of administering Linux or Windows systems at the command-line level
- Working experience with AWS using both the AWS Management Console and the AWS Command Line Interface (AWS CLI)

## What You Will Learn

This course is designed to teach you how to:

- Use the principal concepts and practices behind the DevOps methodology.
- Design and implement an infrastructure on AWS that supports one or more DevOps development projects.
- Use AWS CloudFormation and AWS OpsWorks to deploy the infrastructure necessary to create development, test, and production environments for a software development project.
- Use AWS CodeCommit and AWS CodeBuild to understand the array of options for enabling a Continuous Integration environment on AWS.
- Use AWS CodePipeline to design and implement a Continuous Integration and Delivery pipeline on AWS.
- Use AWS CodeStar to manage all software development activities in one place.
- Implement several common Continuous Deployment use cases using AWS technologies, including blue/green deployment and A/B testing.
- Distinguish between the array of application deployment technologies available on AWS (including AWS CodeDeploy, AWS OpsWorks, AWS Elastic Beanstalk, Amazon EC2 Container Service, and Amazon EC2 Container Registry), and decide which technology best fits a given scenario.
- Use Amazon EC2 Systems Manager for patch management.
- Leverage Automated Testing in different stages of a CI/CD pipeline.
- Fine-tune the applications you deliver on AWS for high performance, and use AWS tools and technologies to monitor your application and environment for potential issues.

## Outline

Module 1: Introduction to DevOps

Module 2: Infrastructure Automation

Module 3: AWS Toolsets

Module 4: Continuous Integration and Continuous Delivery (CI/CD) with Development Tools

Module 5: Introduction to Microservices

Module 6: DevOps and Containers

Module 7: DevOps and Serverless Computing

Module 8: Deployment Strategies

Module 9: Automated Testing

Module 10: Security Automation

Module 11: Configuration Management

Module 12: Observability

Module 13: Reference Architecture