



# DevOps Engineering on AWS

Code: 1979

3 days

## Course Overview

In this course, you will learn how to use the most common DevOps patterns to develop, deploy, and maintain applications on AWS. You will learn about the core principles of the DevOps methodology and examine a number of use cases applicable to startup, small-medium business, and enterprise development scenarios.

## Who Needs To Attend

Systems Administrators and Software Developers

## Course Details

## Topics Include

- 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
- Set up Git on AWS and understand the array of options for enabling a Continuous Integration environment on AWS
- Use the core principles of Continuous Integration and Continuous Deployment
- 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, and Amazon EC2 Container Service), and decide which technology best fits a given scenario
- 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

## Course Outline

This is an emerging technology course. The course outline is subject to change as needed.

- 1. What is DevOps?**
- 2. Infrastructure as Code, Part 1: Design and Security**
- 3. Infrastructure as Code, Part 2: CloudFormation and Configuration Management**
- 4. Continuous Integration in the Cloud**
- 5. Continuous Delivery on AWS**
- 6. Deploying Applications on AWS, Part 1**
- 7. Deploying Applications on AWS, Part**
- 8. Putting It All Together**
- 9. Performance-Tuning Your Deployments**
- 10. Administering and Automating Your Infrastructure**

## **Prerequisites**

- 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