

Detailed Course Curriculum DevOps Engineering on AWS

Duration: 4 Days

Price: DevOps Engineering on AWS \$2,550 SGD + GST
Exam Readiness: AWS Certified DevOps Engineer – Professional \$930 + GST
Professional Level Exam Voucher \$420 SGD + GST
Total - \$3,900 SGD + GST

Delivery Method: AWS Instructor-Led

Intended Audience:

This course is intended for:

- Experienced IT professionals who are already familiar with AWS services and are either;
- AWS Certified Systems Operator – Associate level, or;
- AWS Certified Develop – Associate level

Course Description

Day 1–3 – DevOps Engineering on AWS *DevOps Engineering on AWS* demonstrates how to use the most common DevOps patterns to develop, deploy, and maintain applications on AWS. The course covers the core principles of the DevOps methodology and examines a number of use cases applicable to startup, small- and medium-sized business, and enterprise development scenarios.

Course Objectives: 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.

Day 4 – Exam Readiness Workshop: AWS Certified DevOps Engineer Professional – Delivered Virtually

The AWS Certified DevOps Engineer – Professional exam validates technical expertise in provisioning, operating, and managing distributed application systems on the AWS platform. Join this full-day, advanced-level course to learn how to prepare for the exam by exploring the exam's topic areas and how they map to DevOps on AWS and to specific areas to study. We will review sample exam questions in each topic area and teach you how to interpret the concepts being tested so that you can more easily eliminate incorrect responses. This course covers the core principles of the DevOps methodology and examines a number of use cases applicable to startup, small- and medium-sized business, and enterprise development scenarios.

Learning Objectives

This course teaches you how to:

- Prepare for the AWS Certified DevOps Engineer – Professional exam.
- Implement and manage continuous delivery systems and methodologies on AWS.
- Understand, implement, and automate security controls, governance processes, and compliance validation.
- Define and deploy monitoring, metrics, and logging systems on AWS.
- Implement systems that are highly available, scalable, and self-healing on the AWS platform.
- Design, manage, and maintain tools to automate operational processes.

Course Outline:

Day 1 – DevOps Engineering on AWS (1 of 3 days)

- Introduction to DevOps
- AWS Command Line Interface
- Introduction to DevSecOps
- Deployment Strategies and Developer Tools

Day 2 – DevOps Engineering on AWS (2 of 3 days)

- Infrastructure as Code
- Deep Dive into AWS Developer Tools
- Automated Testing on AWS

Day 3 – DevOps Engineering on AWS (3 of 3 days)

- Configuration Management
- AMI Building and Amazon EC2 Systems Manager
- Containers: Docker and Amazon ECS
- DevOps Customer Case Studies
- Course Wrap-Up

Day 4 - Exam Readiness Workshop: AWS Certified DevOps Engineer Professional (VILT)

- Testing centre information and expectations
- Exam overview and structure
- Content domains and question breakdown
- Topics and concepts within content domains
- Question structure and interpretation techniques
- Practice exam questions