

AWS Developer Associate DVA-C01 Prep

AWS Developer Associate DVA-C01. Lambda, DynamoDB, S3, and hands-on cloud development.

[IT Certifications](#) Instructor: Brian Taylor • 5 sections • 48 lessons • 15.25h total

[View this course online](#) [Browse all courses](#)

About this course

Many developers struggle to translate AWS services into real applications, especially while preparing for the DVA-C01 exam. This course connects exam topics to practical skills, showing you how to build, deploy, and manage applications on AWS.

You will learn to work with core services like Lambda, DynamoDB, and S3 through hands-on labs and real scenarios. The course includes video lessons, downloadable code templates, and practice questions.

Course curriculum

Foundations and Exam Overview

- **Understanding the DVA-C01 Exam Structure (12m)**
We break down the exam format, question types, and scoring so you know exactly what to expect on test day.
- **Setting Up Your AWS Free Tier Account (8m)**
A step-by-step guide to creating and configuring your AWS account safely for learning and lab work.
- **Core AWS Services You Must Know (18m)**
Learn the essential AWS services for developers, including compute, storage, and databases, with practical examples.
- **AWS CLI and SDK Setup (15m)**
Get your development environment ready by installing and configuring the AWS CLI and SDK for your language.
- **IAM Basics for Developers (14m)**
Understand IAM roles, policies, and permissions to securely manage access to AWS resources.
- **AWS Global Infrastructure Overview (10m)**
Learn how regions, availability zones, and edge locations impact application design and performance.
- **Exam Strategy and Study Plan (11m)**
Create a personalized study plan with tips on time management and focusing on high-weight topics.

Core AWS Services Deep Dive

- **Building with AWS Lambda Functions (22m)**
Create, deploy, and test Lambda functions using real-world scenarios and the AWS Management Console.
- **DynamoDB Data Modeling for Applications (25m)**
Design efficient DynamoDB tables and indexes for your applications with hands-on lab exercises.
- **Working with Amazon S3 for Storage (19m)**
Implement S3 buckets, versioning, and lifecycle policies to manage data storage effectively.
- **API Gateway for RESTful APIs (20m)**
Build and secure APIs with API Gateway, integrating it with Lambda and other AWS services.
- **AWS SDK Integration in Your Code (24m)**
Use the AWS SDK to interact with services from your application code, with examples in Python and Node.js.
- **Event-Driven Architectures with SNS and SQS (17m)**
Set up message queues and pub/sub systems for decoupled, scalable applications.
- **Cognito for User Authentication (16m)**
Implement user sign-up, sign-in, and access control using Amazon Cognito in a real case study.
- **CloudWatch for Monitoring and Logging (21m)**
Monitor your applications and set up alarms with CloudWatch, including hands-on lab work.

- **AWS X-Ray for Distributed Tracing (13m)**
Trace requests across services to identify performance bottlenecks in your applications.
- **Problem-Solving: Common Service Integration Issues (28m)**
Walk through troubleshooting scenarios for integrating multiple AWS services in a project.

Security, Deployment, and CI/CD

- **Securing Your AWS Applications (23m)**
Apply security best practices for data encryption, network security, and access control.
- **Using AWS Secrets Manager and Parameter Store (18m)**
Manage sensitive configuration data securely with these services, including a practical demo.
- **Deploying Applications with AWS Elastic Beanstalk (20m)**
Deploy web applications quickly using Elastic Beanstalk and understand its deployment options.
- **CI/CD Pipelines with AWS CodePipeline (26m)**
Build automated pipelines for testing and deploying your code with real-world examples.
- **Infrastructure as Code with AWS CloudFormation (24m)**
Create and manage AWS resources using templates for reproducible deployments.
- **Serverless Deployment with AWS SAM (22m)**
Use the Serverless Application Model to define and deploy serverless applications efficiently.
- **Container Deployment with ECS and ECR (27m)**
Learn to containerize applications and deploy them on Amazon ECS with a step-by-step guide.
- **Real Case Study: Building a Serverless Web App (32m)**
Apply all learned services to build and deploy a complete serverless web application from scratch.

Advanced Developer Topics

- **Optimizing Lambda Performance and Costs (19m)**
Tune Lambda functions for better performance and lower costs with practical tips and metrics.
- **DynamoDB Advanced Queries and Scans (25m)**
Master complex query patterns and optimize DynamoDB performance for large datasets.
- **S3 Performance Optimization (16m)**
Improve S3 throughput and latency with multipart uploads, transfer acceleration, and more.
- **Managing API Gateway Throttling and Caching (18m)**
Configure throttling and caching to protect your APIs and improve response times.
- **Event-Driven Scaling with AWS Auto Scaling (21m)**
Set up scaling policies for EC2 and other services based on real-time demand.
- **Database Options: RDS vs DynamoDB (20m)**
Compare and choose the right database service for your application needs with a decision framework.
- **Using AWS Step Functions for Workflows (23m)**
Orchestrate multi-step processes with Step Functions in a hands-on lab.
- **Cost Management for Developers (17m)**
Track and optimize AWS costs using Budgets, Cost Explorer, and tagging strategies.
- **Troubleshooting Common Exam Scenarios (30m)**
Practice solving tricky exam questions with detailed explanations and walkthroughs.

- Downloadable Templates for Common Patterns (12m)

Get ready-to-use CloudFormation and SAM templates for frequent development scenarios.

Implementation and Next Steps

- Final Exam Practice Questions (28m)

Test your knowledge with a set of practice questions mirroring the DVA-C01 exam style.

- Reviewing Key Concepts with Flashcards (15m)

Use our downloadable flashcards to reinforce important topics for last-minute review.

- Building a Portfolio Project on AWS (32m)

Step-by-step guide to creating a project you can showcase to employers using AWS services.

- Setting Up a Personal Development Environment (14m)

Configure a local and cloud environment for ongoing learning and experimentation.

- Joining AWS Communities and Resources (10m)

Find study groups, forums, and official AWS resources to continue your learning journey.

- Scheduling Your Exam and Final Tips (11m)

Get advice on booking your exam, what to do on test day, and managing exam anxiety.

- Post-Exam: Next Steps in Your AWS Career (16m)

Plan your career path after certification, including advanced AWS certifications and job roles.

- Course Wrap-Up and Q&A (13m)

Recap the course, answer common questions, and provide resources for further study.

- Real Case Study: Enterprise Migration Project (35m)

Analyze a detailed case study of migrating an application to AWS, focusing on developer tasks.

- Problem-Solving Session: Live Q&A (27m)

Join a simulated live session where we solve complex problems submitted by students.

- Creating a Study Group Plan (9m)

Learn how to form or join a study group for accountability and shared learning.

- Final Checklist Before the Exam (8m)

A downloadable checklist to ensure you're fully prepared for the AWS Developer Associate exam.

- Continuing Education Resources (10m)

Discover books, blogs, and courses to deepen your AWS knowledge after passing the exam.

Discover our blog

Learn more with free articles written by our professors and guest experts.

Latest article: **Flight Attendant Preparation: What to Study Before You Apply**

[Visit the blog](#) [All courses](#) [This course](#)