✦ CLOUD COMPUTING · ADVANCED

AWS DevOps Engineer Professional

Automate everything on AWS.



96	8	AWS-DOP
HOURS	MODULES	CERTIFICATION

✦ INSIDE THIS BROCHURE

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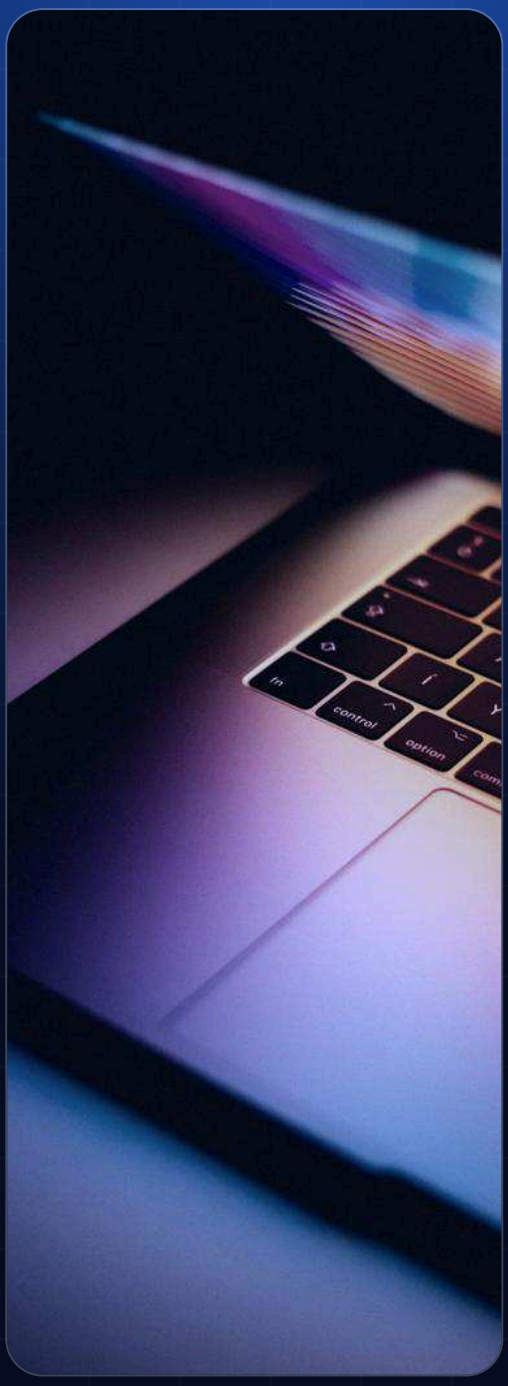
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AT A GLANCE

Level	Advanced
Duration	96 Hours
Modules	8
Certificate	AWS-DOP

✦ PROGRAM OVERVIEW

Automate everything on AWS.



Advanced CI/CD, infrastructure as code, monitoring and incident response on AWS.

High-performing teams ship changes frequently while keeping systems reliable and secure, which requires deep automation. This advanced program prepares engineers for the AWS Certified DevOps Engineer – Professional (DOP-C02) exam across its domains: SDLC automation, configuration management and IaC, resilience, monitoring and logging, incident response, and security and compliance. Labs emphasise production-style automation patterns.

LEVEL	DURATION	CERTIFICATION	DELIVERY
Advanced	96 Hours	AWS-DOP	Instructor-led · Live virtual · Blended



✦ WHAT YOU'LL PRACTISE

Build advanced CI/CD pipelines	01
Manage infrastructure as code	02
Monitor and respond to incidents	03
Prepare for the DevOps Pro exam	04

✦ WHO IT'S FOR

Built for people ready to grow.

01

Beginners & non-tech roles

Cloud fundamentals, AWS CLF, AZ-900, GCP Digital Leader

02

Administrators & SysOps

AZ-104, SOA-C02, GCP ACE

03

Developers

AWS DVA-C02 and AZ-204

04

Architects

SAA, SAP, AZ-305, GCP PCA, multi-cloud

PREREQUISITES

AWS associate-level knowledge (Developer or SysOps)	01
Hands-on scripting in Python or Bash	02
Experience with Git and CI/CD concepts	03

ROLES YOU CAN TARGET

- DevOps Engineer ↗
- Site Reliability Engineer ↗
- Cloud Automation Engineer ↗
- Platform Engineer ↗
- Release Engineer ↗

✦ LEARNING OUTCOMES

What you'll be able to do.

01 Build multi-stage CI/CD pipelines with CodePipeline and CodeBuild

02 Manage infrastructure as code using CloudFormation, CDK and Terraform

03 Implement deployment strategies including blue/green and canary

04 Design resilient, self-healing and multi-region workloads

05 Automate monitoring, logging and incident response workflows

06 Enforce security and compliance automation across accounts

HOURS PER MODULE



✦ PROGRAM RUNWAY

Your journey, module by module.

8
MODULES · 96 HRS

01	**DevOps on AWS Foundations** DevOps principles and DORA metrics, DOP-C02 domains overview, Git branching strategies	8 hrs
02	**SDLC Automation and CI/CD** CodePipeline multi-stage pipelines, CodeBuild buildspecs and testing, CodeDeploy for EC2, ECS and Lambda	16 hrs
03	**Infrastructure as Code** CloudFormation advanced features, StackSets and drift detection, AWS CDK	14 hrs
04	**Deployment Strategies and Containers** Blue/green, canary and linear deployments, ECS and EKS deployments, Lambda aliases and traffic shifting	12 hrs
05	**Resilient Cloud Solutions** High availability and auto scaling, Multi-region and DR automation, Backup automation	12 hrs
06	**Monitoring and Logging** CloudWatch metrics, logs and alarms, CloudWatch Logs Insights and subscriptions, X-Ray and distributed tracing	12 hrs
07	**Incident and Event Response** EventBridge-driven automation, Systems Manager Incident Manager, Automated remediation runbooks	8 hrs
08	**Security, Compliance and Exam Prep** IAM at scale and permission boundaries, Secrets and credential rotation, Config rules and conformance packs	14 hrs
★	**Capstone · Fully Automated AWS Delivery Platform** Assessment, capstone review and certification	

✦ DETAILED CURRICULUM

The syllabus.

Modules 01–03

MODULE 01

DevOps on AWS Foundations

8 hours

Hands-on lab
Set up a multi-account structure for build, staging and production.

TOPICS COVERED

- DevOps principles and DORA metrics
- DOP-C02 domains overview
- Git branching strategies
- Multi-account DevOps setup
- Artifact management with ECR and CodeArtifact

Git · AWS

MODULE 02

SDLC Automation and CI/CD

16 hours

Hands-on lab
Build a cross-account pipeline with automated tests and manual approval.

TOPICS COVERED

- CodePipeline multi-stage pipelines
- CodeBuild buildspecs and testing
- CodeDeploy for EC2, ECS and Lambda
- GitHub Actions integration with OIDC
- Automated testing gates
- Cross-account deployments

GitHub

MODULE 03

Infrastructure as Code

14 hours

Hands-on lab
Provision environments with CDK and deploy StackSets across accounts.

TOPICS COVERED

- CloudFormation advanced features
- StackSets and drift detection
- AWS CDK
- Terraform on AWS
- Systems Manager for configuration
- Service Catalog

Terraform · AWS

LEARN BY DOING

8 guided labs, one in every module.



✦ DETAILED CURRICULUM

Syllabus, continued.

Modules 04–06

MODULE 04

Deployment Strategies and Containers

12 hours

Hands-on lab
Run a canary deployment on ECS with automatic rollback on alarms.

TOPICS COVERED

- Blue/green, canary and linear deployments
- ECS and EKS deployments
- Lambda aliases and traffic shifting
- Feature flags with AppConfig
- Rollback automation

MODULE 05

Resilient Cloud Solutions

12 hours

Hands-on lab
Run a Fault Injection Service experiment and verify automated recovery.

TOPICS COVERED

- High availability and auto scaling
- Multi-region and DR automation
- Backup automation
- Chaos testing with AWS FIS
- Self-healing architectures

aws AWS

MODULE 06

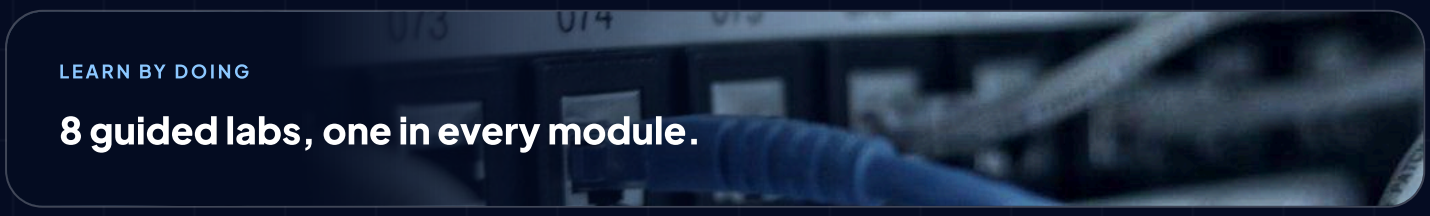
Monitoring and Logging

12 hours

Hands-on lab
Centralise logs across accounts and build SLO-based dashboards and alarms.

TOPICS COVERED

- CloudWatch metrics, logs and alarms
- CloudWatch Logs Insights and subscriptions
- X-Ray and distributed tracing
- Centralised logging with OpenSearch
- Synthetic monitoring with CloudWatch Synthetics
- Dashboards for SLOs



LEARN BY DOING

8 guided labs, one in every module.

✦ DETAILED CURRICULUM

Syllabus, continued.

Modules 07–08

MODULE 07

Incident and Event Response

8 hours

Hands-on lab
Automate response to a failing service using EventBridge and runbooks.

TOPICS COVERED

- EventBridge-driven automation
- Systems Manager Incident Manager
- Automated remediation runbooks
- Health event handling
- Post-incident reviews

MODULE 08

Security, Compliance and Exam Prep

14 hours

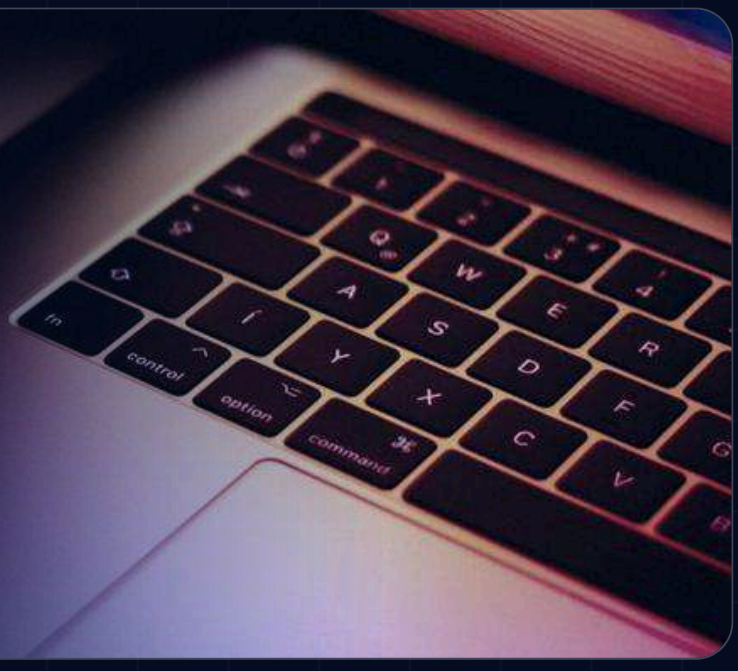
Hands-on lab
Add security scanning and compliance checks to a pipeline, then take a practice exam.

TOPICS COVERED

- IAM at scale and permission boundaries
- Secrets and credential rotation
- Config rules and conformance packs
- Security Hub and automated remediation
- Pipeline and supply-chain security
- Practice exams and revision

CAPSTONE

Fully Automated AWS Delivery Platform



✦ YOUR STACK

Tools you'll build with.

Real platforms and frameworks — the same stack modern teams ship with, practised in cloud-hosted labs.

AWS
Cloud platform

Terraform
Infrastructure as code

Docker
Containers & images

Git
Version control

GitHub
Code hosting & Actions CI



LAB ACCESS

24×7 cloud labs for the length of the program

✦ HANDS-ON WORK

Projects that prove you can do it.

01

Cross-Account CI/CD Pipeline

Build a multi-stage pipeline that tests, scans and deploys an application across development, staging and production accounts.

02

Canary Deployment with Rollback

Implement canary releases for containers or Lambda with CloudWatch alarms triggering automated rollback when error rates or latency rise.

03

Automated Incident Response

Detect failures with CloudWatch and EventBridge, run Systems Manager remediation and notify on-call responders automatically.

CAPSTONE PROJECT

Fully Automated AWS Delivery Platform

Design and implement a delivery platform with IaC-provisioned multi-account environments, secure CI/CD, progressive deployments, centralised observability, chaos-tested resilience and automated compliance and incident response, documented with runbooks and DORA metrics.

Real-world scenario | Mentor review | Portfolio ready



CERTIFICATION

AWS-DOP

Awarded on successful completion of the program assessments.

- MCQ assessments
- Practical lab evaluation
- Project & capstone review
- Final presentation



✦ HOW YOU LEARN

The SAM Learning Framework™

PHASE 01

S

Scenario

Real-world attack and use-case scenarios open every module.

PHASE 02

A

Apply

Hands-on lab work, CTF challenges and live projects.

PHASE 03

M

Master

Assessment, peer review and certification prep.

PHASE 04

M

Mentor

Post-program career guidance and support.

DELIVERY MODELS

- Instructor-Led (ILT)
- Virtual Instructor-Led
- Self-Paced Online
- E-Learning Licensing
- Blended Learning
- Corporate Onsite
- Bootcamp Intensive
- Hackathon / CTF
- Mentorship

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✦ LEARNING PATH · CLOUD COMPUTING

Where this program fits.

Beginner	Intermediate	Advanced	Expert
4 programs	6 programs	You are here	2 programs

BEFORE THIS

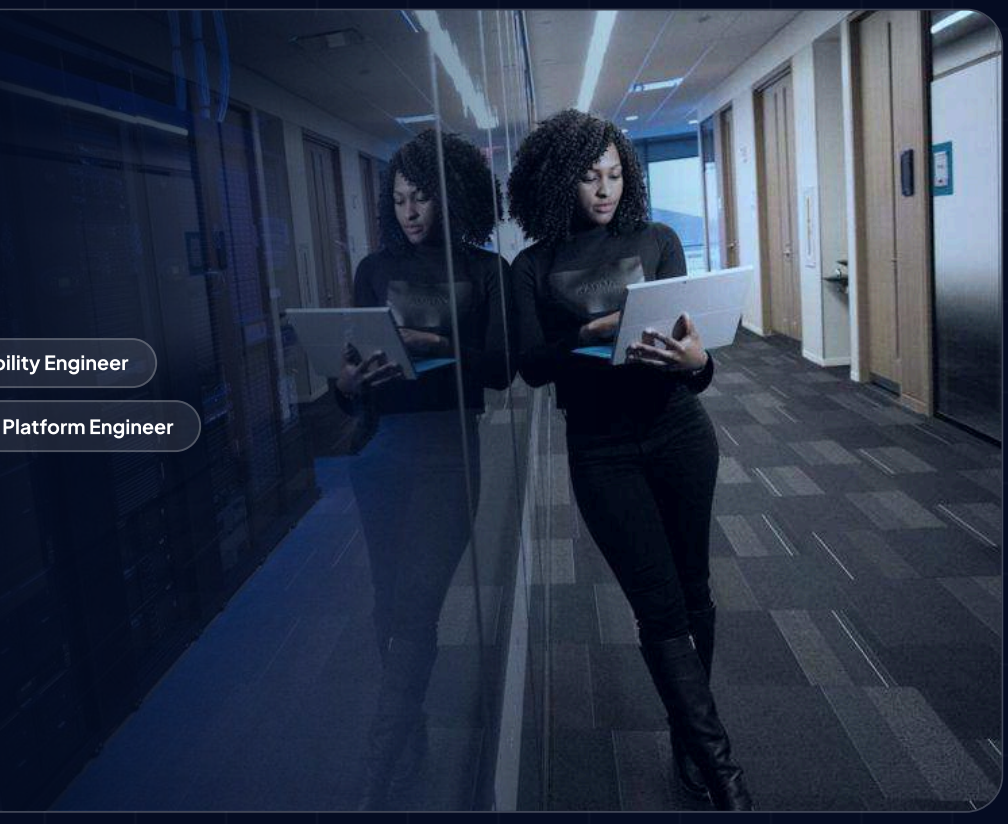
AWS Solutions Architect Associate (SAA-C03)	80 Hours
AWS Developer Associate (DVA-C02)	72 Hours
AWS SysOps Administrator (SOA-C02)	72 Hours
Azure Administrator (AZ-104)	72 Hours

UP NEXT

Cloud Security (AWS/Azure)	72 Hours
Multi-Cloud Architecture & Strategy	80 Hours

CAREER ROLES

- DevOps Engineer
- Site Reliability Engineer
- Cloud Automation Engineer
- Platform Engineer
- Release Engineer



✦ FAQS

Questions, answered.

Q01

Do I need prior experience?

Yes. This advanced program expects AWS associate-level knowledge, such as Developer or SysOps, plus scripting and CI/CD experience. Learners without this background should complete an AWS associate program before enrolling.

Q02

How are classes scheduled and delivered?

Sessions are instructor-led and run as live virtual or blended batches, with weekday and weekend options where available. Timed practice tests and exam-domain reviews are scheduled before the DOP-C02 exam, with notes for revision.

Q03

Will I receive a certificate?

The program follows the official AWS Certified DevOps Engineer – Professional (DOP-C02) exam guide and includes practice assessments. You receive the Samcommunity Academy AWS-DOP certificate after our assessments; the vendor exam is booked and paid for separately with the vendor.

Q04

How do I access labs and tools?

Labs use AWS free-tier or sandbox accounts, plus Docker, Git and Terraform on your computer. Instructors show how to set budgets and clean up resources to avoid unexpected charges, and step-by-step lab guides are shared for every module.

Q05

Is career support included?

You get guidance on portfolio projects, resume positioning and interview preparation for relevant roles. Pipeline and automation projects make strong portfolio evidence. We do not guarantee jobs, placements or salaries.



✦ LET'S TALK

Start AWS DevOps Engineer Professional with Samcommunity.

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Batches, enrolment & career guidance

CORPORATE & INSTITUTIONS

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Team batches & custom programs

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