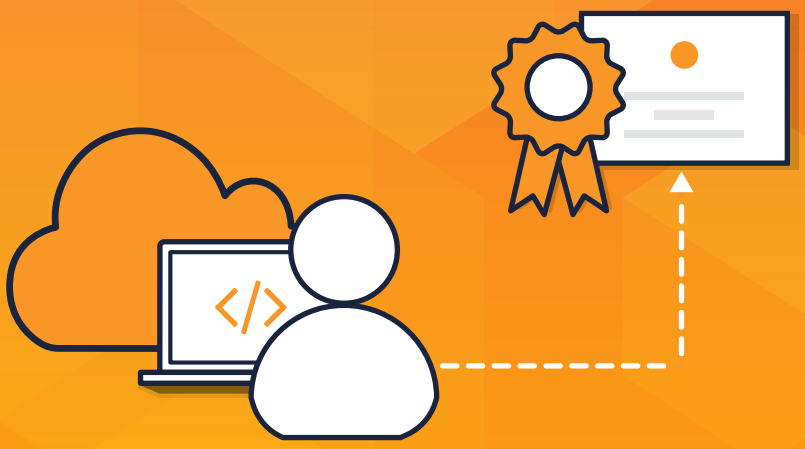


A guide to AWS Training and Certification for startups

Contents

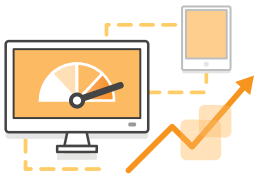
aws

Get the cloud expertise you need to accelerate your startup!

AWS Training and Certification could help your startup speed up development, enhance efficiency and lower costs. Using best practice to get the best from the flexible, scalable tools and technologies in the AWS Cloud could transform the way your startup delivers for clients and customers.

As a startup, innovation and disruption are your springboards for success. AWS gives your startup a breadth of tools that allow a fast start to deep capability. From essentials like user management, scalable frameworks and business logic tools to cutting edge image analysis, voice recognition, artificial intelligence and machine learning, the startups using this technology most effectively will be the ones changing the game.

Here are the top reasons to help your technical professionals to become AWS Certified right now:



Speed, resilience, efficiency

Some of the world's leading startups are born in the AWS Cloud. Using AWS to ramp up quickly, save costs and enhance efficiency has helped them to the top of the pile. With AWS Training and Certification, your startup will gain the in-house the skills and knowledge needed to more effectively leverage AWS Cloud technology and deliver the products and services your customers want more quickly.

Keep the best people working in your startup

According to the 2016 Global Knowledge survey, 73% of IT professionals who pursued certification in the past year noted an increase in their job effectiveness because of related training. The survey also found that employees in organisations with training plans are less likely to leave their companies.

Learn more today!

Foundational, role-based, and specialty training: we have it all.

www.aws.training »

More efficient, more effective startups

How businesses benefit when IT professionals get certified:

"73% of IT professionals who pursued certification in the past year noted an increase in their job effectiveness because of related training."

Global Knowledge 2016 IT Skills and Salary Report

AWS currently has nine certifications:

- AWS Certified Cloud Practitioner
- AWS Certified Developer - Associate
- AWS Certified SysOps Administrator - Associate
- AWS Certified Solutions Architect - Associate
- AWS Certified Solutions Architect - Professional
- AWS Certified DevOps Engineer - Professional
- AWS Certified Advanced Networking - Specialty
- AWS Certified Big Data - Specialty
- AWS Certified Security - Specialty

Learn from the experts at AWS

Our role-based training can help you build your team's cloud skills and prepare them for certification. With a range of digital and classroom training options, your team can learn on their own terms how to design, deploy, and operate infrastructure and applications on the AWS Cloud.

Elevate your startup's AWS Cloud skills

AWS Training courses are led by accredited technical instructors from AWS. These highly experienced, technically proficient and dedicated professionals have all the knowledge and skills your startup needs to learn to succeed on AWS and will help guide individuals to successful AWS Certification.

Learn AWS fundamentals with free digital training

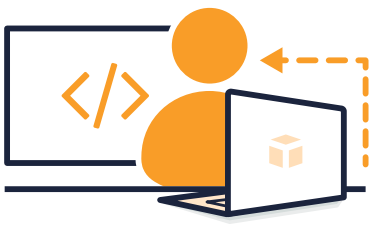
AWS Digital Training delivers essential knowledge for making a successful start on key AWS services and can be learned at any pace. Digital courses are generally around 10 minutes long and are designed to deliver foundational knowledge for dozens of AWS services and solutions. The free *AWS Cloud Practitioner Essentials* curriculum will help your teams prepare for the AWS Certified Cloud Practitioner exam, which validates their knowledge and skills in the AWS Cloud.

Get all the latest knowledge

Working in a startup, you'll know that things change... fast! AWS releases hundreds of new features and updates each year. AWS Training material is continually evaluated and refreshed to reflect the latest AWS services and best practices.

> *"Learn on your terms how to design, deploy, and operate infrastructure and applications on the AWS Cloud."*

Get started, enroll in a course, and begin building your cloud knowledge.



View our course schedule at aws.training today »

What do other successful startups say about AWS Training and Certification?

With AWS Certification, we've been able to understand that innovation and change at speed requires the right insight. The training has enabled us to still work quickly, without sacrificing reliability or security.

Tom Britton

Team lead - Security
Xero

There is a global gold rush at the moment that is generating intense international competition to attract the best tech talent.

Scott Farquhar

Co-founder and CO-CEO
Atlassian

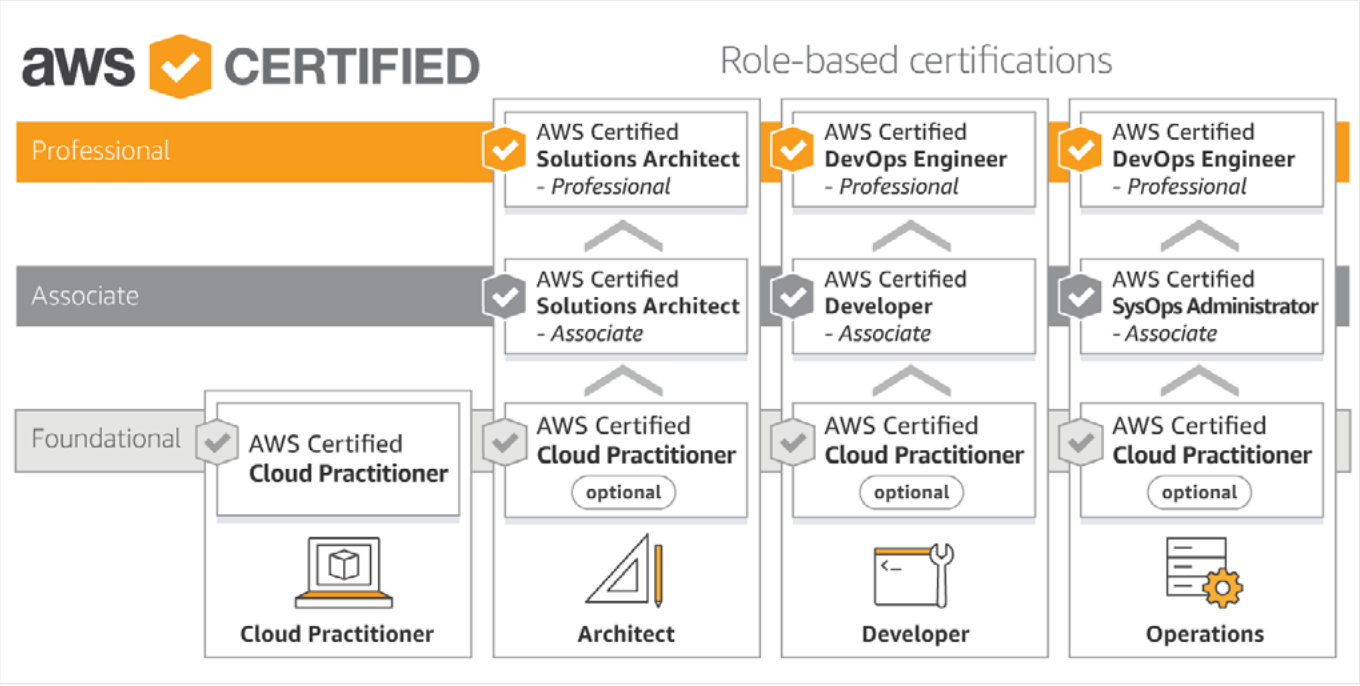
I'd definitely recommend AWS Training and Certification... it really helps round out knowledge of the AWS platform.

Lucas Chan

Senior Consultant
Versent

Role-based certifications

Whether you're looking to add foundational, associate or professional level skills to your startup, AWS Training and Certification offers four role-based paths with advancing levels of expertise, plus three Specialty certifications.

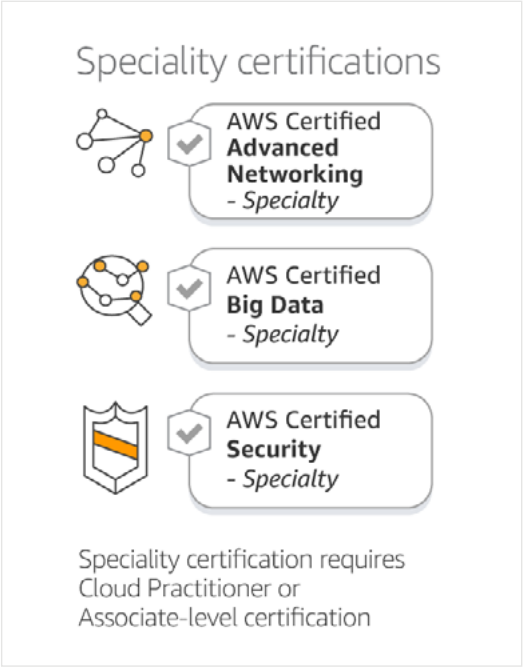


Role-based certifications

- Foundational - Validates overall understanding of the AWS Cloud. Prerequisite to achieving Specialty certification or an optional start toward Associate certification.
- Associate - Technical role-based certifications. No prerequisite.
- Professional - Highest-level technical role-based certification. Relevant Associate certification required.

Specialty certifications

- Validate advanced skills in specific technical areas. One active role-based certification required.



Get to know AWS

Curriculum guide:
AWS Cloud Practitioner Essentials

AWS Cloud Practitioner Essentials **is intended for individuals who seek an overall understanding of the AWS Cloud, independent of specific technical roles. It provides a detailed overview of cloud concepts, AWS services, security, architecture, pricing, and support.**

LEVEL	MODALITY	LENGTH
Foundational	Digital, Self-Paced	6 Hours

Curriculum objectives

Upon completion of this curriculum, learners should be able to:

- Define what the AWS Cloud is and the basic global infrastructure
- Describe the key services on the AWS Platform and their common use cases (e.g., compute, analytics, etc.)
- Describe basic AWS Cloud architectural principles
- Describe basic security and compliance aspects of the AWS platform and the shared security model
- Define the billing, account management, and pricing models
- Identify sources of documentation or technical assistance (e.g., whitepapers, support tickets, etc.)
- Describe the AWS Cloud value proposition
- Describe basic/core characteristics of deploying and operating in the AWS Cloud

Intended audience

This course is intended for:

- Sales
- Legal
- Marketing
- Business analysts
- Project managers
- Chief Experience Officers
- AWS Academy students
- Other IT-related professionals

View course description online »

aws.amazon.com/training/course-descriptions/cloud-practitioner-essentials

Curriculum outline

Note: Course outline may vary slightly based on the regional location and/or language in which the class is delivered.

Section 1: AWS Cloud Overview

- Introduction to the Cloud
- Introduction to the AWS Cloud

Section 2: AWS Technology Overview

- Overview of Services and Categories
- Introduction to the AWS Global Infrastructure
- Introduction to Amazon VPC
- Introduction to Security Groups
- Introduction to Amazon EC2
- Introduction to Amazon EBS
- Introduction to Amazon S3

Section 3: AWS Security Overview

- Introduction to AWS Security
- The AWS Shared Responsibility Model
- AWS Access Control and Management
- AWS Security Compliance Programs
- AWS Security Resources

This is an entry-level training, but it assumes the following:

- General IT technical knowledge
- General IT business knowledge

Get to know AWS

Curriculum guide:
AWS Technical Essentials

AWS Technical Essentials **introduces you to AWS products, services, and common solutions. It provides you with fundamentals to become more proficient in identifying AWS services so that you can make informed decisions about IT solutions based on your business requirements and get started working on AWS.**

LEVEL	MODALITY	LENGTH
Foundational	Instructor-led, Live or Virtual Class	1 Day

Course objectives

This course teaches you how to:

- Recognise terminology and concepts as they relate to the AWS platform and navigate the AWS Management Console
- Understand the foundational services, including Amazon Elastic Compute Cloud (EC2), Amazon Virtual Private Cloud (VPC), Amazon Simple Storage Service (S3), and Amazon Elastic Block Store (EBS)
- Understand the security measures AWS provides and key concepts of AWS Identity and Access Management (IAM)
- Understand AWS database services, including Amazon DynamoDB and Amazon Relational Database Service (RDS)
- Understand AWS management tools, including Auto Scaling, Amazon CloudWatch, Elastic Load Balancing (ELB), and AWS Trusted Advisor

Intended audience

This course is intended for:

- Individuals responsible for articulating the technical benefits of AWS services to customers
- Individuals interested in learning how to get started with using AWS
- Sysops administrators, solutions architects, and developers interested in using AWS services

Course outline

Note: Course outline may vary slightly based on the regional location and/or language in which the class is delivered.

- Introduction and History of AWS
- AWS Foundational Services: EC2, VPC, S3, EBS
- AWS Security, Identity, and Access Management: IAM
- AWS Databases: RDS, DynamoDB
- AWS Management Tools: Auto Scaling, CloudWatch, Elastic Load Balancing, Trusted Advisor

Hands-On Activity

This course allows you to test new skills and apply knowledge to your working environment through a variety of practical exercises.

As this is an essentials course, there are no recommended prerequisite qualifications or experience required

View course description online »

aws.amazon.com/training/course-descriptions/essentials

Architect path

Curriculum guide:
Architecting on AWS

Architecting on AWS covers the fundamentals of building IT infrastructure on AWS. The course is designed to teach solutions architects how to optimise the use of the AWS Cloud by understanding AWS services and how these services fit into cloud-based solutions. This course emphasises AWS Cloud best practices and recommended design patterns to help students think through the process of architecting optimal IT solutions on AWS. It also presents case studies throughout the course that showcase how some AWS customers have designed their infrastructures and the strategies and services they implemented. Opportunities to build a variety of infrastructures via a guided, hands-on approach are also provided.

LEVEL	MODALITY	LENGTH
Intermediate	Instructor-led, Live or Virtual Class	3 Days

Course objectives

This course teaches you how to:

- Make architectural decisions based on the AWS-recommended architectural principles and best practices
- Leverage AWS services to make your infrastructure scalable, reliable, and highly available
- Leverage AWS-managed services to enable greater flexibility and resiliency in an infrastructure
- Make an AWS-based infrastructure more efficient in order to increase performance and reduce costs
- Use the Well-Architected Framework to improve architectures with AWS solutions

Intended audience

This course is intended for:

- Solutions architects
- Solution design engineers

View course description online »

aws.amazon.com/training/course-descriptions/architect

Course outline

Note: Course outline may vary slightly based on the regional location and/or language in which the class is delivered.

Day 1

- Core AWS Concepts
- Core AWS Knowledge
- Core AWS Services
- Designing Your Environment
- Making Your Environment Highly Available

Day 2

- Forklifting an Existing Application onto AWS
- Event-Driven Scaling
- Automating
- Decoupling
- Build a New Environment

Day 3

- Well-Architected Framework
- Troubleshooting Your Environment
- Large-Scale Design Patterns and Case Studies

There are recommended prerequisites for this course

Architect path

Curriculum guide:
Advanced Architecting on AWS

Advanced Architecting on AWS **is intended for individuals who are experienced with designing scalable and elastic applications on the AWS platform. Building on concepts introduced in *Architecting on AWS*, this course covers how to build complex solutions that incorporate data services, governance, and security on AWS. This course introduces specialised AWS services, including AWS Direct Connect and AWS Storage Gateway to support hybrid architecture. It also covers designing best practices for building scalable, elastic, secure, and highly available applications on AWS.**

LEVEL	MODALITY	LENGTH
Advanced	Instructor-led, Live or Virtual Class	3 Days

Course objectives

This course teaches you how to:

- Apply the AWS Well-Architected Framework
- Manage multiple AWS accounts for your organisation
- Connect on-premises data centres to the AWS Cloud
- Understand billing implications of connecting multi-region VPCs
- Move large data from on-premises data centres to the AWS Cloud
- Move large data from an on-premises data center to AWS
- Design large datastores for the AWS Cloud
- Understand different architectural designs for scaling a large website
- Protect your infrastructure from DDoS attacks
- Secure your data on AWS with encryption
- Design protection of data at rest and data in flight
- Enhance the performance of your solutions
- Select the most appropriate AWS deployment mechanism

Intended audience

This course is intended for:

- Experienced IT professionals who are already familiar with AWS services

There are recommended prerequisites for this course

View course description online »

aws.amazon.com/training/course-descriptions/advanced-architecting/

Course outline

Note: Course outline may vary slightly based on the regional location and/or language in which the class is delivered.

Day 1

- Review of Architecting for the Cloud Best Practices and the AWS Well-Architected Framework
- AWS Account Strategies
- Advanced Networking Architectures
- Deployment Management on AWS

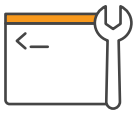
Day 2

- Designing Large Datastores
- Moving Large Datastores into AWS
- Big Data Architectures
- Designing for Large Scale Applications

Day 3

- Building Resilience into Your Architecture
- Data Encryption and Key Management in AWS
- Securing Data on AWS
- Designing for Performance

Developer path



Curriculum guide:
Developing on AWS

Developing on AWS **helps developers understand how to use the AWS SDK to develop secure and scalable cloud applications. The course provides in-depth knowledge about how to interact with AWS using code and covers key concepts, best practices, and troubleshooting tips.**

LEVEL	MODALITY	LENGTH
Foundational	Instructor-led, Live or Virtual Class	3 Days

Course objectives

This course teaches you how to:

- Set up the AWS SDK and developer credentials for Java, C#/.Net, Python, and JavaScript
- Use the AWS SDK to interact with AWS services and develop solutions
- Use Amazon Simple Storage Service (Amazon S3) and Amazon DynamoDB as datastores
- Integrate applications and data by using Amazon Kinesis, AWS Lambda, Amazon Simple Queue Service (Amazon SQS), Amazon Simple Notification Service (Amazon SNS), and Amazon Simple Workflow Service (Amazon SWF)
- Use AWS Identity and Access Management (IAM) for service authentication and Web Identity Framework and Amazon Cognito for user authentication
- Use Amazon ElastiCache and Amazon CloudFront to improve application scalability
- Deploy applications by using AWS Elastic Beanstalk and AWS CloudFormation

Intended audience

This course is intended for:

- Intermediate-level software developers

There are recommended prerequisites for this course

View course description online »

aws.amazon.com/training/course-descriptions/developing

Course outline

Note: Course outline may vary slightly based on the regional location and/or language in which the class is delivered.

Day 1: Building the Foundation

- Introduction to Developing on AWS
- Choosing a Datastore
- Developing Storage Solutions with Amazon S3
- Developing Flexible NoSQL Solutions with Amazon DynamoDB

Day 2: Connecting Applications and Data with Event-Driven Processing

- Working with Events
- Developing Event-Driven Solutions with Amazon Kinesis Stream
- Developing Event-Driven Solutions with Amazon SWF, Amazon SQS, and Amazon SNS
- Developing Event-Driven Solutions with AWS Lambda

Day 3: Developing and Deploying Secure, Scalable Applications

- Developing Secure Applications
- Caching Information for Scalability
- Monitoring Your Application and AWS Resources with Amazon CloudWatch
- Deploying Applications with AWS Elastic Beanstalk and AWS CloudFormation

Operations path

Curriculum guide:
Systems Operations on AWS

***System Operations on AWS* is designed to teach those in a Systems Administrator or Developer Operations (DevOps) role how to create automatable and repeatable deployments of networks and systems on the AWS platform. The course covers the specific AWS features and tools related to configuration and deployment, as well as common techniques used throughout the industry for configuring and deploying systems.**

LEVEL	MODALITY	LENGTH
Intermediate	Instructor-led, Live or Virtual Class	3 Days

Course objectives

This course teaches you how to:

- Use standard AWS infrastructure features such as Amazon Virtual Private Cloud (VPC), Amazon Elastic Compute Cloud (EC2), Elastic Load Balancing, and Auto Scaling from the command line
- Use AWS CloudFormation and other automation technologies to produce stacks of AWS resources that can be deployed in an automated, repeatable fashion
- Build functioning virtual private networks with Amazon VPC from the ground up using the AWS Management Console
- Deploy Amazon EC2 instances using command line calls and troubleshoot the most common problems with instances
- Monitor the health of Amazon EC2 instances and other AWS services
- Manage user identity, AWS permissions, and security in the cloud
- Manage resource consumption in an AWS account using tools such as Amazon CloudWatch, tagging, and Trusted Advisor
- Select and implement the best strategy for creating reusable Amazon EC2 instances
- Configure a set of Amazon EC2 instances that launch behind a load balancer, with the system scaling up and down in response to demand
- Edit and troubleshoot a basic AWS CloudFormation stack definition

View course description online »

aws.amazon.com/training/course-descriptions/sysops/

Course outline

Note: Course outline may vary slightly based on the regional location and/or language in which the class is delivered.

Day 1

- System Operations on AWS Overview
- Networking in the Cloud
- Computing in the Cloud

Day 2

- Storage and Archiving in the Cloud
- Monitoring in the Cloud
- Managing Resource Consumption in the Cloud

Day 3

- Configuration Management in the Cloud
- Creating Scalable Deployments in the Cloud
- Creating Automated and Repeatable Deployments

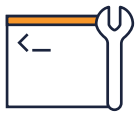
Intended audience

This course is intended for:

- System administrators
- Software developers, especially those in a developer operations (DevOps) role

There are recommended prerequisites for this course

Developer path



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Operations path

Curriculum guide:
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 use cases for startup, small and medium-sized business, and enterprise development scenarios.**

LEVEL	MODALITY	LENGTH
Foundational	Instructor-led, Live or Virtual Class	3 Days

Course objectives

This course teaches you how to:

- Use the principal concepts and practices of 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 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 common Continuous Deployment use cases with 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

View course description online »

aws.amazon.com/training/course-descriptions/devops-engineering

Course outline

Note: Course outline may vary slightly based on the regional location and/or language in which the class is delivered.

Day 1

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

Day 2

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

Day 3

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

Intended audience

This course is intended for:

- System administrators
- Software developers

There are recommended prerequisites for this course

A guide to AWS Training and Certification for startups

2018

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Published by AWS, July 2018.

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