

Learn how to build modern applications on AWS using microservices, containers, and serverless technologies using the programming language of your choice. You'll also be exposed to the foundational principles of DevOps and continuous integration/continuous delivery (CI/CD) on AWS. This guide can also help prepare you for the AWS Certified Developer – Associate certification exam. If you're interested specifically in digital courses and labs to help you develop these skills, explore the Developer Learning Plan at [explore.skillbuilder.aws](https://explore.skillbuilder.aws). To provide suggestions on Ramp-Up Guides, please contact [rampupguides@amazon.com](mailto:rampupguides@amazon.com).

## Step 1: Learn AWS developer fundamentals

Learning Resource	Duration	Type
Tools to Build on AWS	30 minutes	<a href="#">Webpage</a>
Introduction to AWS Elastic Beanstalk	10 minutes	<a href="#">Digital Training</a>
Getting Started with .NET on AWS	90 minutes	<a href="#">Digital Training</a>
Getting Started with .NET on AWS	2 hours	<a href="#">Self-paced Lab</a>
Learn how to migrate your ASP.NET app to AWS in minutes!	30 minutes	<a href="#">Tutorial</a>
Learn the basics of Python on AWS	90 minutes	<a href="#">Workshop</a>
Developing on AWS	3 days	<a href="#">Classroom Training</a>

## Step 2: Learn to build modern applications

Learning Resource	Duration	Type
Implementing Microservices on AWS	1 hours	<a href="#">Whitepaper</a>
Building Modern Applications at AWS	25 minutes	<a href="#">Video</a>
Building Modern Java Applications on AWS	18 hours	<a href="#">Coursera Digital Training</a> <a href="#">edX Digital Training »</a>
Building Modern Node.js Applications on AWS	18 hours	<a href="#">Coursera Digital Training</a> <a href="#">edX Digital Training »</a>
Building Modern Python Applications on AWS	18 hours	<a href="#">Coursera Digital Training</a> <a href="#">edX Digital Training »</a>
Accelerating Messaging Modernization with Amazon MQ	30 minutes	<a href="#">Digital Training</a>
Modern Application Development on AWS	1 hour	<a href="#">Whitepaper</a>

## Step 3: Learn all about containers

Learning Resource	Duration	Type
Introduction to Containers	15 minutes	<a href="#">Digital Training</a>
Introduction to AWS Fargate	10 minutes	<a href="#">Digital Training</a>
Building Containerized Applications on AWS	10 hours	<a href="#">Coursera Digital Training »</a>
AWS App2Container – A New Containerizing Tool for Java and .NET Applications	30 minutes	<a href="#">Blog Post</a>
Deep Dive on AWS Fargate: Building Serverless Containers at Scale	40 minutes	<a href="#">Digital Training</a>
Deep Dive on Container Security	30 minutes	<a href="#">Digital Training</a>

## Step 3.1: Learn about Amazon Elastic Container Service (Amazon ECS)

Learning Resource	Duration	Type
Amazon Elastic Container Service (ECS) Primer	30 minutes	<a href="#">Digital Training</a>
ECS Workshop	2 hours	<a href="#">Workshop</a>
Best practices for CI/CD using AWS Fargate and Amazon ECS	60 minutes	<a href="#">Video</a>
Introduction to Amazon Elastic Container Service	50 mins	<a href="#">Self-paced Lab &gt;&gt;</a>
Introduction to Amazon Elastic Container Registry	57 mins	<a href="#">Self-paced Lab &gt;&gt;</a>
Working with Amazon Elastic Container Service	55 mins	<a href="#">Self-paced Lab &gt;&gt;</a>

## Step 3.2: Learn about Amazon Elastic Kubernetes Service (Amazon EKS)

Learning Resource	Duration	Type
Amazon Elastic Kubernetes Service (EKS) Primer	1 hour	<a href="#">Digital Training</a>
Running Containers on Amazon Elastic Kubernetes Service (Amazon EKS)	3 days	<a href="#">Classroom Training</a>
EKS Workshop	2 hours	<a href="#">Workshop</a>
De-mystifying cluster networking for Amazon EKS Worker nodes	30 minutes	<a href="#">Blog Post</a>

## Step 4: Learn all about serverless fundamentals

Learning Resource	Duration	Type
Introduction to Serverless Development	25 minutes	<a href="#">Digital Training</a>
Getting into a Serverless Mindset	30 minutes	<a href="#">Digital Training</a>
AWS Lambda Foundations	1 hour	<a href="#">Digital Training</a>
Amazon API Gateway for Serverless Applications	75 minutes	<a href="#">Digital Training</a>

Amazon DynamoDB for Serverless Architectures	2 hours	<a href="#">Digital Training</a>
Getting Started with Lambda Tutorial	20 minutes	<a href="#">Tutorial</a>

## Step 4.1: Dive deeper with serverless

Learning Resource	Duration	Type
Developing Serverless Solutions on AWS	3 days	<a href="#">Classroom Training</a>
Serverless Hands-On Labs	4 hours	<a href="#">Hands-On Labs</a>
Introduction to Lambda	45 minutes	<a href="#">Self-paced Lab &gt;&gt;</a>
Introduction to Amazon API Gateway	55 minutes	<a href="#">Self-paced Lab &gt;&gt;</a>
Architecting Serverless Solutions	3 hours	<a href="#">Digital Training</a>
Innovator Island serverless workshop	2 hours	<a href="#">Workshop</a>
	5 hours	<a href="#">Video</a>
Build a Modern Web Application in your preferred language	2 hours	<a href="#">Workshop</a>
Modernization Workshops with 3 <sup>rd</sup> Party Integration	2 hours	<a href="#">Workshop</a>
Security Overview of AWS Lambda	1 hour	<a href="#">Whitepaper</a>
Create a near real-time multiplayer game built on AWS	2 hours	<a href="#">Workshop</a>
AWS Serverless Ramp-Up Guide		<a href="#">Ramp-Up Guide</a>

## Step 5: Get started with DevOps on AWS

Learning Resource	Duration	Type
Getting Started with DevOps on AWS	60 minutes	<a href="#">Digital Training</a>
Getting Started with DevOps on AWS	2 hours	<a href="#">Self-paced Lab</a>
CI/CD for serverless applications	1 hour	<a href="#">Workshop</a>
Build and Deploy APIs with a Serverless CI/CD	45 minutes	<a href="#">Digital Training</a>
AWS DevOps Ramp-Up Guide		<a href="#">Ramp-Up Guide</a>

## Step 6: Prepare for and take the AWS Certified Developer - Associate certification exam

Learning Resource	Duration	Type
Exam Readiness: AWS Certified Developer – Associate	2 hours	<a href="#">Digital Training</a>
AWS Certified Developer – Associate exam	2 hours	<a href="#">Exam</a>

Step 7: Learn how to quickly and easily build secure and scalable full stack applications

Learning Resource	Duration	Type
Build web and mobile apps with AWS Amplify	30 minutes	<a href="#">Tutorial</a>
Build a React Application using AWS Amplify	50 minutes	<a href="#">Tutorial</a>
Build a Full-Stack iOS App using AWS Amplify	45 minutes	<a href="#">Tutorial</a>
Mobile applications how to blog directory	30 minutes	<a href="#">Blog Posts</a>

Step 8: Continue your learning with advanced topics

Learning Resource	Duration	Type
Advanced Developing on AWS	3 days	<a href="#">Classroom Training</a>
Instrumenting distributed systems for operational visibility	60 minutes	<a href="#">Webpage</a>

Explore additional resources

Learning Resource	Description	Type
Learning Library	Continue to learn by exploring our extensive portfolio of free digital training and classroom training. Filter according to your preferences, or find a specific course using the “Search” box.	<a href="#">Explore »</a>
AWS Whitepapers & Guides	Authored by AWS and the AWS community, explore technical whitepapers, technical guides, reference material, and reference architecture diagrams.	<a href="#">Explore »</a>
AWS User Group	Join and connect with AWS users all over the world to share ideas and learn.	<a href="#">Explore »</a>
AWS Events and Webinars	Connect with, collaborate with, and learn from AWS experts. Key events include AWS.	<a href="#">Explore »</a>
AWS Podcast	Listen and learn about AWS.	<a href="#">Explore »</a>
AWS Blog	Read about the latest launches from AWS Technical Evangelist Jeff Barr and others.	<a href="#">Explore »</a>

<b>AWS Documentation</b>	Search for AWS service guides, API references, tutorials, projects, SDKs, and toolkits.	<a href="#">Explore »</a>
<b>AWS Knowledge Center</b>	Review AWS Support's responses to AWS customers' most frequently asked questions.	<a href="#">Explore »</a>
<b>AWS FAQs</b>	Find answers to common Product and Technical frequently asked questions.	<a href="#">Explore »</a>
<b>AWS Hands-On Tutorials</b>	Get started with 10-minute, step-by-step tutorials to launch your first application.	<a href="#">Explore »</a>
<b>AWS Solutions Library</b>	Use vetted, technical reference implementations designed to help you solve common problems and build faster.	<a href="#">Explore »</a>
<b>AWS YouTube Channel</b>	Explore a wide variety of AWS topics by watching videos created by AWS experts across the world.	<a href="#">Explore »</a>
<b>AWS Architecture Center</b>	Explore reference architecture diagrams, vetted architecture solutions, Well-Architected best practices, patterns, icons, and more.	<a href="#">Explore »</a>
<b>Amazon's Builders' Library</b>	Learn how Amazon builds and operates software.	<a href="#">Explore »</a>
<b>AWS Twitch Channel</b>	Learn how millions of customers are currently leveraging AWS cloud products and solutions to build sophisticated applications with increased flexibility, scalability and reliability.	<a href="#">Explore »</a>
<b>AWS Twitch for Developers</b>	Join the developer education and community with AWS Live Video.	<a href="#">Explore »</a>
<b>AWS Security Documentation</b>	Configure AWS services to meet your security and compliance objectives.	<a href="#">Explore »</a>

**For a training plan customized for your requirements,** contact your AWS Account Manager or contact us [here](#)

**We would love to hear from you.**  
Provide your feedback on this AWS Ramp-Up Guide [here](#)

**For those learners who have existing Qwiklabs credits** or those that want to use Qwiklabs instead of a subscription, you can search for the AWS labs in the Ramp Up Guide [here](#) and access from Qwiklabs.