

# ALX - AWS Program Prospectus

## Program Overview

The ALX - AWS learning program is a 15-week cloud computing course in partnership with Amazon Web Services. This program has been designed to equip participants with the ability to build & leverage modern applications using AWS cloud technologies. In addition to the AWS specialization, participants will also engage with the 'ALX Foundations course that will see them learn critical skills such as effective communication & collaboration, project management, data analysis & visualization, and critical thinking.

The depth of expertise in technical training, when combined with ALX's reach and experience in educational delivery at scale throughout Africa, creates an opportunity to upskill millions of young people on relevant technologies. Upon successfully completing the program, participants will gain certifications in two main tracks: 1) Cloud Practitioner Essentials & 2) Solutions Architect.

### 1. Cloud Practitioner Certification

This course is designed for participants who seek an overall understanding of the Amazon Web Services (AWS) Cloud, independent of specific technical roles. Participants will learn about AWS Cloud concepts, AWS services, security, architecture, pricing, and support to build their AWS Cloud knowledge.

Some of the course objectives include:

- Summarize the working definition of AWS
- Differentiate between on-premises, hybrid-cloud, and all-in cloud
- Describe the basic global infrastructure of the AWS Cloud
- Explain the six benefits of the AWS Cloud
- Describe and provide an example of the core AWS services, including compute, network, databases, and storage
- Identify an appropriate solution using AWS Cloud services with various use cases

- Describe the AWS Well-Architected Framework
- Explain the shared responsibility model
- Describe the core security services within the AWS Cloud
- Describe the basics of AWS Cloud migration
- Articulate the financial benefits of the AWS Cloud for an organization's cost management
- Define the core billing, account management, and pricing models
- Explain how to use pricing tools to make cost-effective choices for AWS services

## 2. Solutions Architect Certification

The AWS Solutions Architect Certification builds on top of the Cloud Practitioner essentials. It verifies participant knowledge of the AWS Cloud and their know-how in building a well-architected infrastructure in AWS. Tested concepts include topics such as distributed architecture, serverless, and containerized applications.

Preparing for and attaining this certification will showcase:

- Knowledge and skills in computing, networking, storage, and database AWS services as well as AWS deployment and management services.
- Knowledge and skills in deploying, managing, and operating workloads on AWS as well as implementing security controls and compliance requirements.
- Knowledge and skills in using the AWS Management Console and the AWS Command Line Interface (CLI), Understanding of the AWS Well-Architected Framework, AWS networking, security services, and the AWS global infrastructure.

## Basic Program Requirements

### Technical requirements

- Basic computer literacy (using a web browser, operating an email account, downloading files, etc.).
- Basic coding & networking skills.
- An active email account.
- Access to a functioning computer & reliable internet connectivity.
- Access to Google Office productivity apps (Docs, Sheets, Slides – freely accessible to anyone with a Google account).

## Curriculum Overview

The AWS program will last for 15 weeks with participants moving from fundamental to intermediate/advanced levels. By the end of the program, participants will be certified as AWS Cloud Practitioners & Solutions Architect.

Here's a brief breakdown of the week-by-week content:

Track	Week	Module	Time in hours (weekly)
-	Week 0	ALX Onboarding	10
Cloud Practitioner	Week 1	Cloud Practitioner Essentials	8.5
	Week 2	Foundations & Introductions to Services	11.5
	Week 3	Cloud Quest	11
	Week 4	Catch up & Exam Prep	10
Solutions Architect	Week 5	Solutions Architecture	10.5
	Week 6	Storage & Databases	10
	Week 7	Networking	8.5
	Week 8	Catch up	10
	Week 9	Cloud Architecture	11
	Week 10	Database Migration	10.5
	Week 11	Step Functions & Security I	9.5
	Week 12	Security II	7.5
	Week 13	Exam Prep	10
	Week 14	Solutions Architect Exam	2-10