



simplilearn

Cloud Architect

Master's Program

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Program Overview

Build your AWS, Microsoft Azure, and Google Cloud Platform expertise from the ground up with Simplilearn's comprehensive Cloud Architect Master's Program. This program will help you master the architectural principles and services of the top cloud platforms, enabling you to design and deploy highly scalable, fault-tolerant applications and develop skills to transform yourself into an AWS, Azure, and GCP architect.

Program Features



128 hours of self-paced learning



420 hours of in-depth Blended Learning



40+ in-demand skills & 25+ services



Job-assist program (India only)



292 hours of instructor-led training



Exam voucher included



Real world capstone project

About Simplilearn

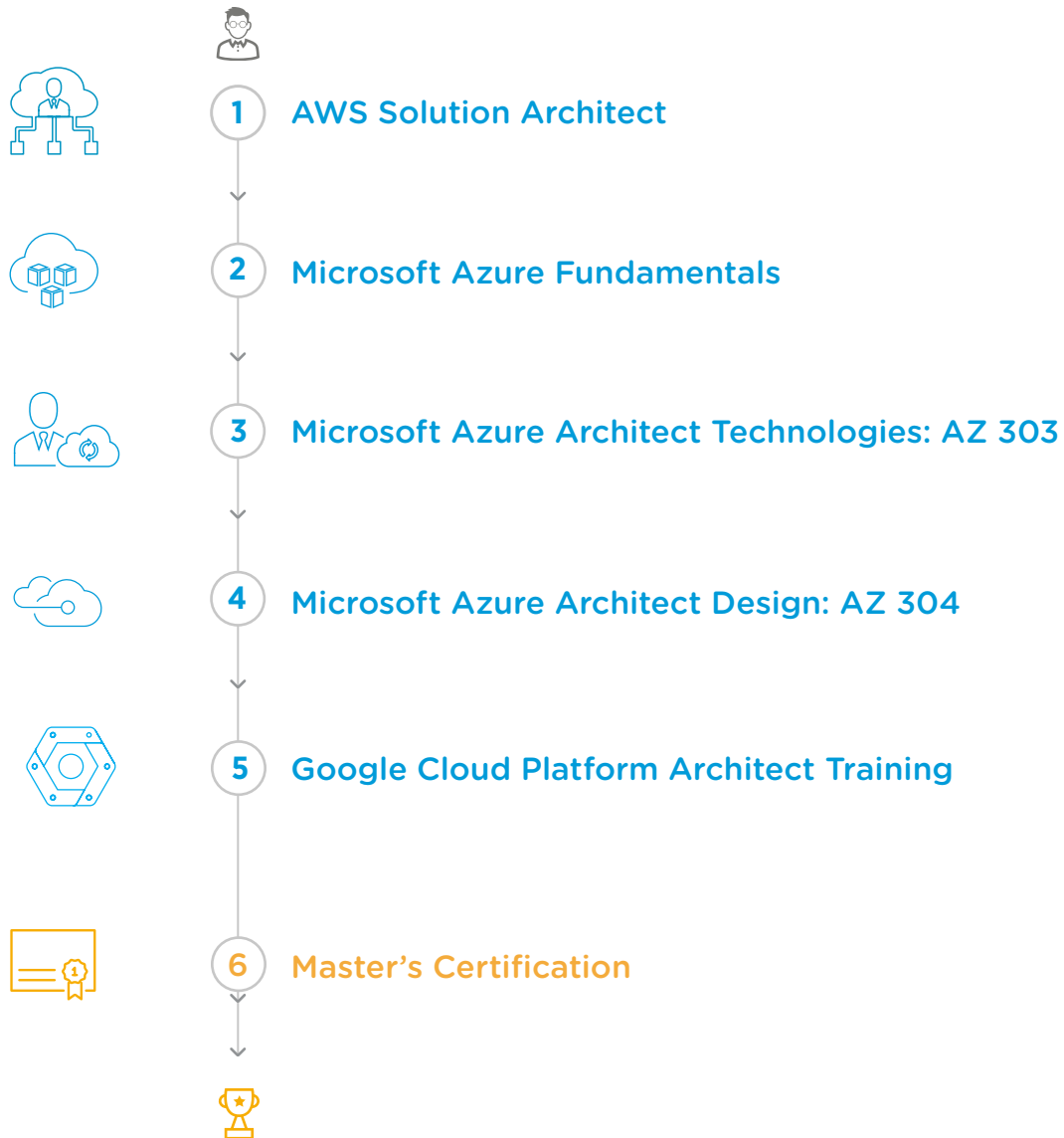
Simplilearn is the world's #1 online bootcamp provider that enables learners through rigorous and highly specialized training. We focus on emerging technologies and processes that are transforming the digital world, at a fraction of the cost and time as traditional approaches. Over one million professionals and 2000 corporate training organizations have harnessed our award-winning programs to achieve their career and business goals.

Partnerships and Certifications Alignment

This Cloud Architect Master's Program is aligned to the curriculum of Amazon Web Services and Microsoft Azure. We are the registered training provider for this program.



Learning Path



Elective

- AWS Technical Essentials
- AWS Developer Associate
- AWS SysOps Associate
- AWS Database Migration
- Microsoft Certified: Azure Administrator Associate AZ-104
- Microsoft Certified Azure Developer Associate: AZ:204

Program Outcomes

At the end of this Cloud Architect Master's Program, you will be able to:

- ✓ Understand the main principles of cloud computing and how they have been implemented in Microsoft Azure and AWS
- ✓ Manage subscriptions, billing, and role-based access control regarding Azure users and groups
- ✓ Implement use cases and configuration options for Azure App Services and App Service environments
- ✓ Design an Azure app service web app by using Azure CLI, Powershell, and other tools
- ✓ Manage security and identity for Azure solutions
- ✓ Implement AWS security and testing and become an expert in AWS components such as S3, DynamoDB, Elastic Beanstalk, and CloudFormation
- ✓ Get an overview of AWS DMS, the AWS Schema Conversion tool, and the AWS Database Migration Service
- ✓ Deploy, manage, and operate scalable, highly available, and fault-tolerant systems on AWS
- ✓ Select the appropriate AWS service based on data, compute, database, or security requirements
- ✓ Set up GCP account and utilize GCP services: networking, storage, content and delivery network
- ✓ Understand Google Virtual Machines and how to work with them
- ✓ Store and manage data in the cloud SQL



Target Audience

Any professional interested in hosting highly scalable, fault-tolerant applications on the AWS and Microsoft Azure platforms should take this program. However, the following roles and disciplines are ideal for this course:

- ✓ Fresh graduates who intend to take the plunge into the cloud job market
- ✓ Professionals with less than 2 years of experience who are working in either technical or non-technical job roles and wish to build successful careers in the cloud computing domain
- ✓ People working in the following roles will benefit the most from the Cloud Architect Master's Program:
 - ✓ Solutions architects
 - ✓ Programmers
 - ✓ Cloud developers
 - ✓ Cloud software engineers
 - ✓ DevOps professionals

AWS Solutions Architect

This AWS Solutions Architect Certification training will enable you to design, plan, and scale AWS implementations utilizing over 70 cloud computing services. The course is aligned with the latest AWS exam featuring Amazon designated best practices.

Key Learning Objectives

By the end of this course, you will:

- ✓ Formulate solution plans and provide guidance on AWS architectural best practices
- ✓ Design and deploy scalable, highly available, and fault-tolerant systems on AWS
- ✓ Identify the lift and shift of an existing on-premises application to AWS
- ✓ Decipher the ingress and egress of data to and from AWS
- ✓ Select the appropriate AWS service based on data, compute, database, or security requirements
- ✓ Estimate AWS costs and identify cost control mechanisms

Course Curriculum

Self Paced Learning Curriculum

- ✓ Lesson 01 - Introduction
- ✓ Lesson 02 - Getting Started With AWS
- ✓ Lesson 03 - Identity and Access Management
- ✓ Lesson 04 - S3

- ✓ Lesson 05 - EC2 and EBS
- ✓ Lesson 06 - ELB and Autoscaling
- ✓ Lesson 07 - Cloudwatch
- ✓ Lesson 08 - VPC0
- ✓ Lesson 09 - Databases
- ✓ Lesson 10 - Route 53
- ✓ Lesson 11 - Additional Key Services
- ✓ Lesson 12 - SAA C02 Latest Services

Live Class Curriculum

- ✓ Lesson 01 - Course Introduction
- ✓ Lesson 02 - AWS Overview
- ✓ Lesson 03 - Amazon Elastic Compute Cloud
- ✓ Lesson 04 - Amazon Storage Services
- ✓ Lesson 05 - Amazon Virtual Private Cloud
- ✓ Lesson 06 - Databases on AWS
- ✓ Lesson 07 - Amazon Route 53
- ✓ Lesson 08 - IAM and Security on AWS
- ✓ Lesson 09 - Application and Serverless Services in AWS
- ✓ Lesson 10 - Secure and Highly Available Architecture

Microsoft Azure Fundamentals

Simplilearn's Microsoft Azure Fundamentals Training Course will familiarize you with the main principles of cloud computing and how they have been implemented in Microsoft Azure. This course will get you up to speed on Azure services, security, privacy, compliance, trust, pricing, and support.

Key Learning Objectives

After completing this course, you will be able to:

- ✓ Describe cloud computing, Azure, and Azure subscriptions
- ✓ Describe and create Azure web apps
- ✓ Create and configure VMs in Microsoft Azure
- ✓ Describe Azure storage
- ✓ Describe and deploy databases in Azure
- ✓ Describe Azure AD

Course Curriculum

- ✓ Module 01 - Cloud Concepts
- ✓ Module 02 - Core Azure Services
- ✓ Module 03 - Security, Privacy, Compliance, and Trust
- ✓ Module 04 - Azure Pricing and Support

Microsoft Azure Architect Technologies AZ-303 Training

The Microsoft Azure Architect Technologies AZ-303 online training course prepares you for a career as a certified Azure Cloud Solutions Architect. You will learn how to manage Azure resources, configure and deploy virtual machines, and master Azure Cognitive Services solutions as you become familiar with the Azure platform.

Key Learning Objectives

By the end of this Microsoft Azure Architect Technologies AZ-303 Training course, you will be able to:

- ✓ Manage Azure subscriptions and resources
- ✓ Configure, deploy, and manage virtual machines and networks
- ✓ Evaluate and perform server migration to Azure
- ✓ Implement and manage advanced virtual networking and application services
- ✓ Manage and secure identities
- ✓ Select compute and storage solutions
- ✓ Perform hybrid networking
- ✓ Evaluate throughput and structure of data access
- ✓ Create web applications using PaaS
- ✓ Create apps and services running on Service Fabric
- ✓ Use Azure Kubernetes Service for health monitoring and maintenance
- ✓ Develop long-running tasks and distributed transactions
- ✓ Configure a message-based integration architecture
- ✓ Develop for asynchronous processing and autoscaling
- ✓ Create Azure Cognitive Services solutions

Course Curriculum

Section 01: Course Introduction

- ✓ Lesson 01: Course Introduction

Section 02: Implement and Monitor an Azure Infrastructure

- ✓ Lesson 01: Implement Cloud Infrastructure Monitoring
- ✓ Lesson 02: Implement Storage Accounts
- ✓ Lesson 03: Implement VM's for Windows and Linux
- ✓ Lesson 04: Automate Deployment and Configuration of Resources
- ✓ Lesson 05: Implement Virtual Networking
- ✓ Lesson 06: Implement Azure Active Directory
- ✓ Lesson 07: Implement and Manage Hybrid Identities

Section 03: Implement Management and Security Solutions

- ✓ Lesson 01: Manage Workloads in Azure
- ✓ Lesson 02: Implement Load Balancing and Network Security
- ✓ Lesson 03: Implement and Manage Azure Governance Solutions
- ✓ Lesson 04: Manage Security for Applications

Section 04: Implement Solutions for Apps

- ✓ Lesson 01: Implement An Application Infrastructure
- ✓ Lesson 02: Implement Container based App

Section 05: Implement and Manage Data Platforms

- ✓ Lesson 01: Implement NoSQL Databases
- ✓ Lesson 02: Implement Azure SQL databases

Microsoft Azure Architect Design: AZ-304

This Azure training course covers a number of advanced activities on the Azure platform, such as managing Azure resources, configuring and deploying virtual machines and networks, mastering Azure AD, and securing data. You will also learn how to identify data storage options, integrate SaaS service on Azure, author deployments, and more.

Key Learning Objectives

By the end of this Microsoft Azure Architect Design: AZ-304 course, you will be able to::

- ✓ Manage security and identity for Azure solutions
- ✓ Integrate SaaS services on the Azure platform
- ✓ Compare and analyze database options in Azure
- ✓ Monitor and automate Azure solutions
- ✓ Deploy resources with Azure Resource Manager
- ✓ Choose the correct backup option for infrastructure and data hosted in Azure
- ✓ Automate the deployment of future resources for backup recovery or scaling purposes
- ✓ Build Azure IaaS-Based Server Applications (ADSK)
- ✓ Deploy network infrastructure for use in Azure solutions
- ✓ Integrate Azure solution components using messaging services

Course Curriculum

- ✓ Course Introduction
- ✓ Lesson 02: Design Monitoring
- ✓ Lesson 03: Design Identity and Security
- ✓ Lesson 04: Design Data Storage
- ✓ Lesson 05: Design Business Continuity
- ✓ Lesson 06: Design Infrastructure

Google Cloud Platform Architect Training

Simplilearn's Google Cloud Platform Architect certification program will aid you with the skills needed to advance your career in the cloud architecture and become a certified Google Cloud Architect Professional. The course covers IAM, Networking, cloud storage, and much more. This online GCP Architect certification course introduces you to the comprehensive and flexible infrastructure and platform services provided by Google Cloud Platform. You will learn to analyze and deploy infrastructure components such as networks, storage systems, and application services.

Key Learning Objectives

By the end of this Microsoft Azure Architect Design: AZ-304 course, you will be able to:

- ✓ Set up GCP account and utilize GCP services: Networking, storage, content and delivery network
- ✓ Add Identity Access Management member
- ✓ Understand Google Virtual Machines and how to work with them
- ✓ Comprehend cache and restrictions and how to avoid excessive billing
- ✓ Store and manage data in the cloud SQL

Course Curriculum

- ✓ Lesson 01 - Introduction to Google Cloud for Techs
- ✓ Lesson 02 - Google Cloud - Introduction to GCP
- ✓ Lesson 03 - Google Cloud IAM - (Identity and Access Management)

- ✔ Lesson 04 - Google Regions and Zones
- ✔ Lesson 05 - Google Cloud - Virtual Machine
- ✔ Lesson 06 - Networking (VPC)
- ✔ Lesson 07 - Google Cloud Load balancer and Autoscaling
- ✔ Lesson 08 - CDN - Content and Delivery Network
- ✔ Lesson 09 - Google Cloud Storage - Cloud SQL
- ✔ Lesson 10 - Cloud Storage - Datastore
- ✔ Lesson 11 - Cloud Storage - Spanner
- ✔ Lesson 12 - Google Cloud Storage - Storage (Store that Gorilla picture!)

Cloud Capstone Project

This cloud capstone project will give you an opportunity to implement the skills you learned throughout this program. Through dedicated mentoring sessions, you will learn how to solve a real-world, industry-aligned problem. This project is the final step in the learning path and will enable you to showcase your expertise in cloud computing to prospective employers.

Program Projects

Project 1: Implement the Azure IaaS

OSS Corporation is evaluating Azure as a deployment platform. To do this they need to create virtual networks in the aforementioned region, create test virtual machines in both virtual networks, establish the connectivity between both the networks via VNet peering, and ensure connectivity is properly established.

Project 2: Using Azure Portal to Implement Security and PaaS Service

OSS Corporation has decided to onboard an employee on the company's default Azure Active Directory and assign a Custom RBAC role under which they will be able to read the network, configure storage along with VM. Under this custom RBAC, the employee should also be given permission to start and restart the VM. Your task is to onboard the employee under Default Azure AD, create the Custom RBAC for the role of computer operator, and provision and implement the Azure Web App.

Project 3: Azure Function Listening to a Queue 02

The InGen Soft company decided to bring serverless functionality into their application workload using the Azure function and Storage queue. As a developer, log in to the Azure Portal and create Resource Group, Storage Account, and Input Queue services. Create an Azure function using Visual Studio, which also includes Queue Binding and Deployment from visual studio.

Project 4: Automating Workloads with ARM Templates

The Rand Enterprises Corporation wants to test an ARM template to bring infrastructure as code into practice. As part of the operations team, you will have to define the entire networking architecture using the ARM template. Once that's in place, you will need to create the storage account along with a virtual machine to house the application.

Project 5: Migrate SQL Server Database to MySQL Using AWS DMS

In this project, the learner will install the AWS Schema Conversion Tool and use it to verify the effort required to migrate the SQL Server source database. Fix the issue, rerun the database assessment report, and apply Schema to target MySQL database. Program Projects

Project 6: Custom Virtual Private Cloud (VPC) Creation

Create a custom VPC with public and private subnets on two availability zones and launch instances into each subnet.

Project 7: Load Balancer Configuration

Launch two web servers and configure a load balancer and auto-scaling.

Project 8: RD Gateway Configuration

Configure RD Gateway on a VPC with a public and private subnet.

Project 9: Deploying an Online Movie Watching Application on Cloud

You are working for an online entertainment provider. As you have knowledge of cloud computing, you are asked to deploy the company's website on the cloud.

Project 10: Deploying an Online Doctor's Clinic Application on Cloud

You work for a health care company. As a cloud architect, you are asked to deploy the LiveDocApp website on the cloud.

Project 11: Deploying a Restaurant Application to Cloud

As a cloud architect, you are asked to deploy the restaurant application on the cloud.

Project 12: Deploying Cart Management Application to Cloud

You work for an ecommerce company. As a cloud architect, you are asked to deploy the Cart Management Application on the cloud.

Tools and Services Covered



Amazon ECS



Amazon EC2



AWS Lambda



Amazon
DynamoDB



Azure
Container
Service



Virtual Machines



Azure
Functions



Elastic
Beanstalk

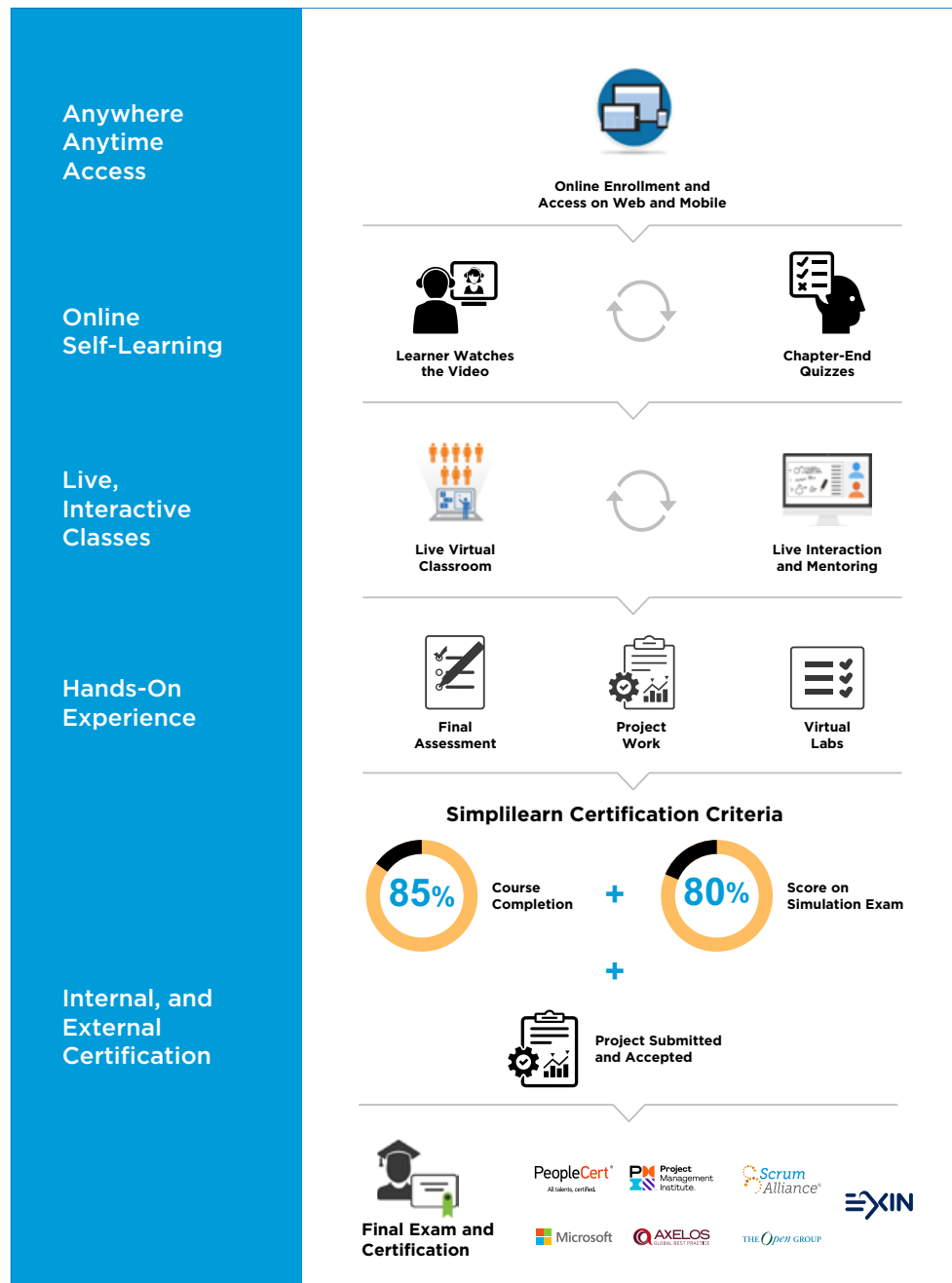


Certificate



Upon completion of this Master's Program, you will also receive an industry-recognized Master's Certificate from Simplilearn.

Classroom-Level Immersion: Delivered Digitally



Customer Reviews

Sreekumar Changat

I am currently enrolled in the Azure Architect Master's Program from Simplilearn. The organization provides an excellent platform with a hands-on approach through its learning platform. This includes self-learning videos, live classroom lectures, lots of practical assignments, and tests. Thank you, Simplilearn team!



Prabhangshu Kashyap Sarma

Simplilearn's learning platform is the best place to learn with tutorial videos, live classes, and live projects that you can easily understand the subject matter. They also have excellent customer service.



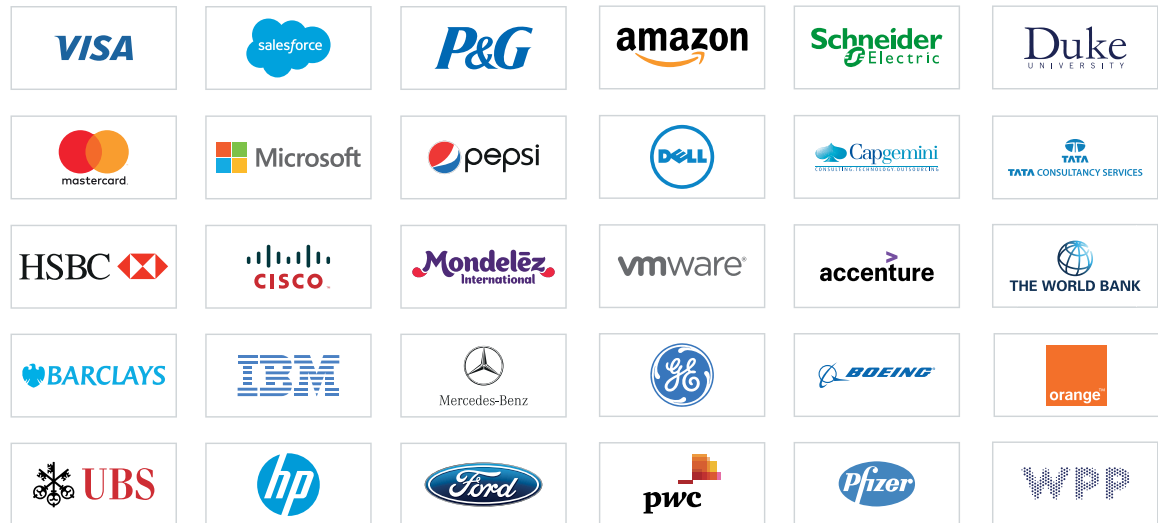
Vikram Rahul Padamatinti

The materials and content are very relevant and in line with the certification exam. The standard of questions in the sample quizzes is equal to that of the certification. Thank you Simplilearn for providing such quality content and helping me to become a master in this particular course.



Corporate Training

Top clients we work with:



Features of Corporate Training:



Tailored learning solutions



Flexible pricing options



Enterprise-grade learning management system (LMS)



Enterprise dashboards for individuals and teams



24X7 learner assistance and support



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