**simpli**learn

# Azure Cloud Architect

## Master's Program

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# About the Program

Simplilearn's Azure Cloud Architect Master's Program will build your Microsoft Azure expertise from the ground up. You'll learn to master the architectural principles and services of Azure; design and deploy highly scalable, fault-tolerant applications; and develop skills to transform yourself into an Azure cloud architect.

# Key Features

262 hours of in-depth Blended Learning

62 hours of self-paced learning

Job-assist program (India only)

200 hours of instructor-led training

20+ in-demand tools and skills

# 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.

# Program Outcomes

At the end of this Azure Cloud Architect Program, you will be able to:

- ✅ Understand the main principles of cloud computing and how they have been implemented in Microsoft Azure

- ✅ 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

# Partnerships and Certifications Alignment

This Azure Cloud Architect Master Program is aligned to the curriculum of Microsoft Azure and we are the silver training provider for this program.
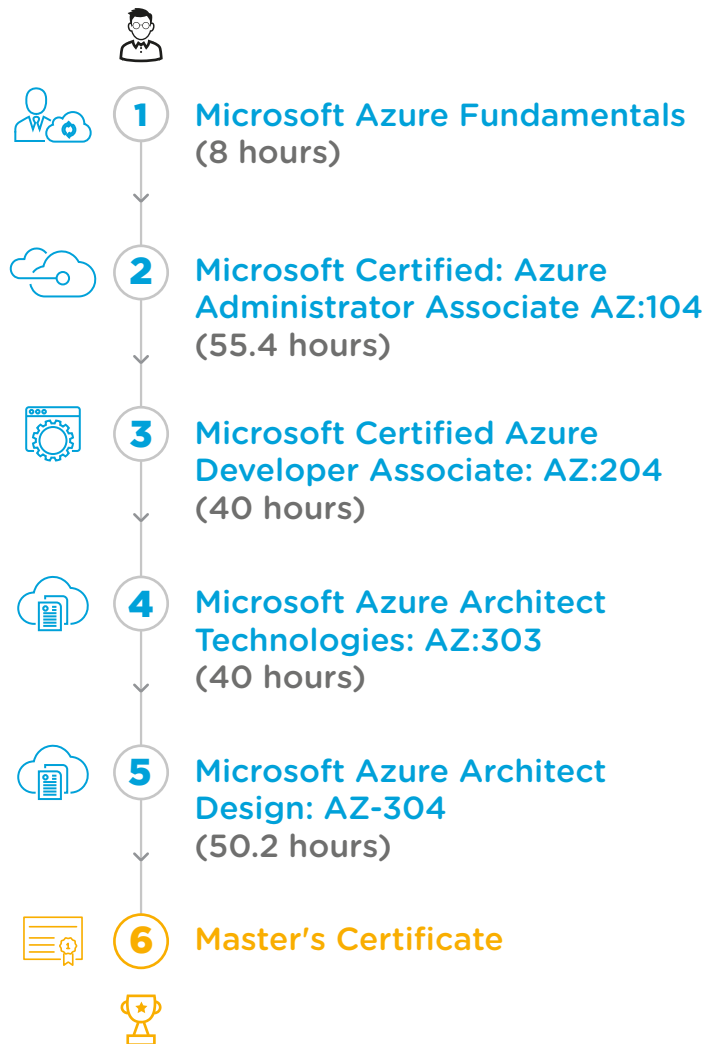
# Target Audience

This program caters to those who are hoping to enter the cloud industry. The following roles and disciplines are ideal for this course:

- ✅ Fresh graduates who are intent on taking the plunge into the job market

- ✅ Any professionals who are working in either technical or non-technical job roles and want to shift to cloud domain

# Learning Path

1. **Microsoft Azure Fundamentals**
   (8 hours)

2. **Microsoft Certified: Azure Administrator Associate AZ:104**
   (55.4 hours)

3. **Microsoft Certified Azure Developer Associate: AZ:204**
   (40 hours)

4. **Microsoft Azure Architect Technologies: AZ:303**
   (40 hours)

5. **Microsoft Azure Architect Design: AZ-304**
   (50.2 hours)

6. **Master's Certificate**

# 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 Certified: Azure Administrator Associate AZ-103

Simplilearn's Azure Administrator training provides you with a deep understanding of the entire administrative lifecycle in Azure environments. This Azure course shows you how to maintain services related to computing, storage, network, and security. Enhance your Azure Administrator skills and prepare to ace the AZ-103 Azure Administrator exam.

## Key Learning Objectives

After completing the Azure Administrator online training course, you will be able to:

- Manage subscriptions, billing, and role-based access control regarding Azure users and groups

- Utilize Azure Monitor to configure alerts and review the Azure Activity Log

- Deploy resources with ARM templates and organize Azure resources

- Implement, manage, and secure storage with shared access keys, Azure backup, and Azure File Sync

- Store and access data using Azure Content Delivery Network and the Import and Export service

- Build, execute, manage, and monitor virtual machines in Azure Portal with Azure PowerShell

- Use Azure DNS domains, zones, record types, and resolution methods

- Execute site connectivity schemas comprising VNet-to-VNet connections and virtual network peering

- Integrate, secure, and manage identities with Azure Active Directory, Self-Service Password Reset, Azure AD Identity Protection, and integrated SaaS applications

- ✅ Migrate servers to Azure

- ✅ Implement use cases and configuration options for Azure App Services and App Service environments

- ✅ Manage and secure web apps with backup, restore, snapshot, and cloning

- ✅ Deploy serverless computing features such as Azure Functions, Event Grid, and Service Bus

- ✅ Configure Azure Load Balancer, Azure Traffic Manager, and Azure Application Gateway

- ✅ Use Azure RBAC to grant a granular level of access based on an administrator's assigned tasks

- ✅ Utilize Azure Multi-factor Authentication to configure a strong authentication for users at sign-in

- ✅ Execute Azure AD Privileged Identity Management to configure access rights based on the just-in-time administration

# Course Curriculum

- ✅ Section 01 - Quick Start

- ✅ Section 02 - Microsoft Azure Administrator Course

- ✅ Section 03 - Manage Azure Subscriptions

- ✅ Section 04 - Analyse Resource Utilization and Consumption

- ✅ Section 05 - Manage Resource Groups

- ✅ Section 06 - Create and Configure Storage Accounts

- ✅ Section 07 - Import and Export Data to Azure

- ✅ Section 08 - Configure Azure Files

- ✅ Section 09 - Azure Backup

- ✅ Section 10 - Azure Virtual Machines

# Microsoft Certified: Azure Developer Associate AZ-203

Azure Developer certification training is aligned with the latest (2018) edition of Azure Developer Certified Associate exam AZ-203, which is a combination of AZ-200 and AZ-201, as announced by Microsoft. This course prepares you for a certification proving that you are verified by Microsoft to select, develop, and implement Azure cloud technology solutions, including cloud storage, Platform as a Service (PaaS), cloud security, cloud integration, Azure Cognitive Services, Bot, and IoT solutions.

## Key Learning Objectives

✅ Upon successful completion of this online training course, you will be able to:

✅ Understand Azure application design and connectivity patterns, Azure networking topologies, and Azure storage facilities

✅ Learn to create, read, update, and delete tables by using code

✅ Design an Azure app service web app by using Azure CLI, Powershell, and other tools

✅ Create Azure functions including bindings and triggers

✅ Create an Azure Container Service (ACS/AKS) cluster using Azure CLI and Azure Portal

✅ Develop media solutions that use AI services

✅ Secure data solutions by using encryption, Azure confidential computing, and SSL/TLS communications

✅ Develop asynchronous processing and understand how to implement the appropriate asynchronous computer model

✅ Implement autoscaling in your solution and code that addresses the transient state

✅ Learn how to implement large-scale, parallel, and high-performance apps by using batches

- ✓ Manage APIs by using API Management (APIM)

- ✓ Create an APIM instance, configure authentication for APIs, create an API gateway, and define policies for APIs

- ✓ Configure a message-based integration architecture by using the services included in Azure

- ✓ Configure an app or service to send email

- ✓ Develop an application message model, including message schema and message exchange

- ✓ Create an event model, topics, and subscriptions

- ✓ Develop solutions using Computer Vision

- ✓ Implement speech services and natural language processing in your app

- ✓ Design and manage dictionaries for FAQ generation by using QnA Maker

- ✓ Configure Azure Time Series Insights for your IoT solution

- ✓ Configure the Stream Analytics Service for inputs and outputs for your IoT device

# Course Curriculum

- ✓ Section 01 Course Welcome

- ✓ Section 02  Virtual Machines

- ✓ Section 03  Azure Batch Services

- ✓ Section 04  Containerized Solutions

- ✓ Section 05  Azure App Service

- ✓ Section 06  Mobile Apps

- ✓ Section 07  API App

- ✓ Section 08  Function App

- ✓ Section 09  Azure Storage Accounts

- ✓ Section 10  CosmosDB

- ✓ Section 11  SQL Database

- ✓ Section 12  Blob Containers

- ✓ Section 13  Azure Authentication

- ✓ Section 14  Azure Access Control

- ✓ Section 15  Secure Data

- ✓ Section 16  Scaling Apps and Services

- ✓ Section 17  Caching and Content Delivery Networks

- ✓ Section 18  Monitoring and Logging

- ✓ Section 19  Consuming Azure Services

- ✓ Section 20  Course Wrap Up

# Microsoft Azure Architect Technologies AZ-303

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

- After completing this online Azure certification 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 the 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 the more 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

After completing this online Azure certification training course, you will be able to:

- ✅ Manage security and identity for Azure solutions

- ✅ Integrate SaaS services available 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

- Lesson 01: 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

# 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 established properly.

### 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, 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 need to create the storage account along with a virtual machine to house the application.

# Tools and Services Covered
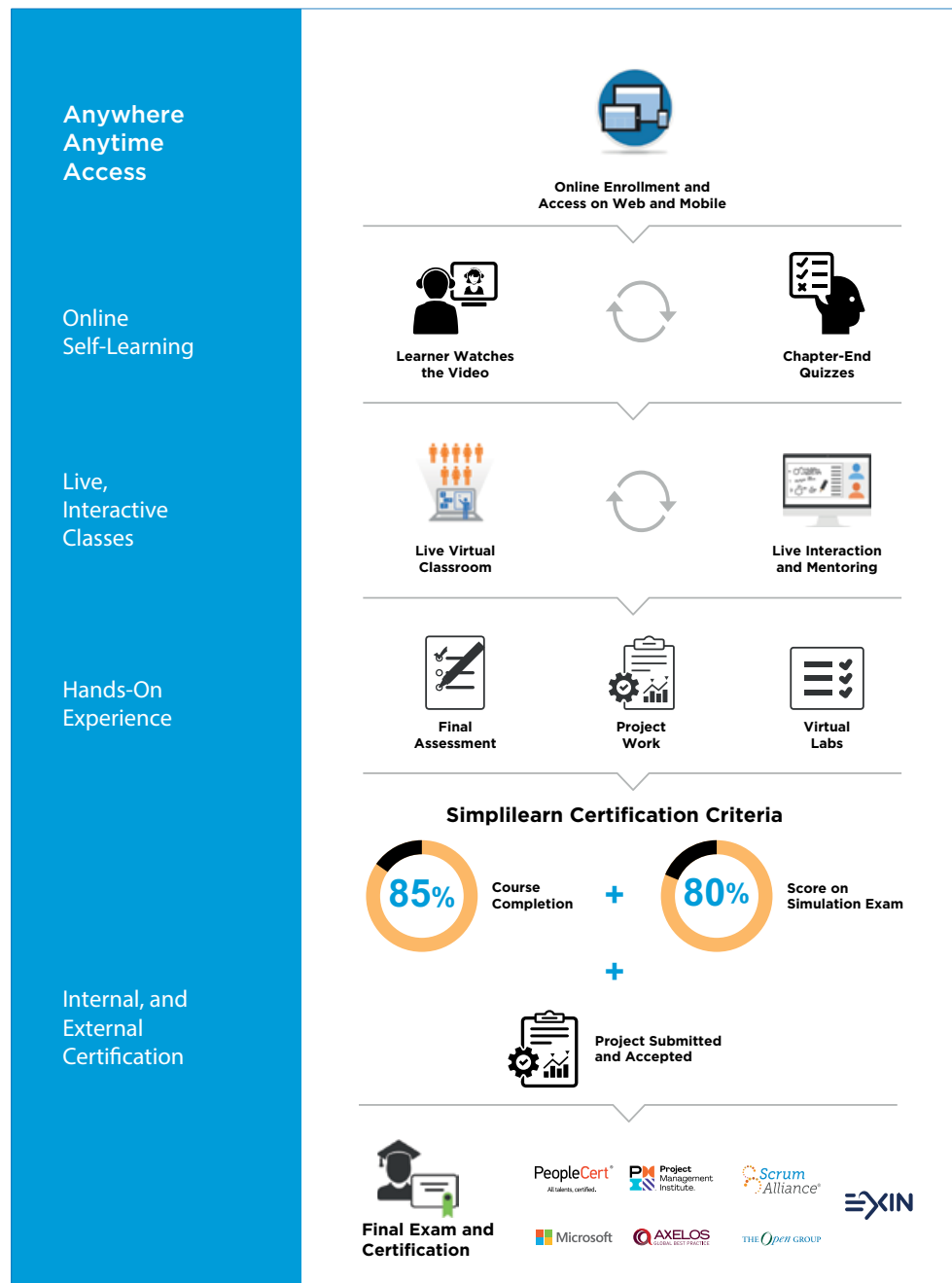
Azure kubernetes Services

Azure Cosmos DB

Azure Active Directory

Azure Container Service

Azure Resource Groups

Virtual Machines

Amazon ECS

Amazon EC2

Amazon RDS

Amazon DynamoDB

Microsoft PowerShell

DNS

SQL

Elastic Beanstalk

# Certificate



CERTIFICATE
OF ACHIEVEMENT

simplilearn

## Azure Cloud Architect

MASTERS
PROGRAM

THIS IS TO CERTIFY THAT

## JOHN DOE

*Has successfully graduated from the <Course Name> Masters Program summa cum laude having completed all mandated course requirements and industry projects with distinction.*

Date: __ / __ /2020

Krishna Kumar, CEO

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

# Classroom-Level Immersion: Delivered Digitally

**Anywhere Anytime Access**

Online Enrollment and Access on Web and Mobile

**Online Self-Learning**

Learner Watches the Video

Chapter-End Quizzes

**Live, Interactive Classes**

Live Virtual Classroom

Live Interaction and Mentoring

**Hands-On Experience**

Final Assessment

Project Work

Virtual Labs

## Simplilearn Certification Criteria

**85%** Course Completion **+** **80%** Score on Simulation Exam

**+**

Project Submitted and Accepted

**Internal, and External Certification**

**Final Exam and Certification**

PeopleCert
All talents, certified.

Project Management Institute.

Scrum Alliance

EXIN

Microsoft

AXELOS
GLOBAL BEST PRACTICE

THE Open GROUP

# 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.
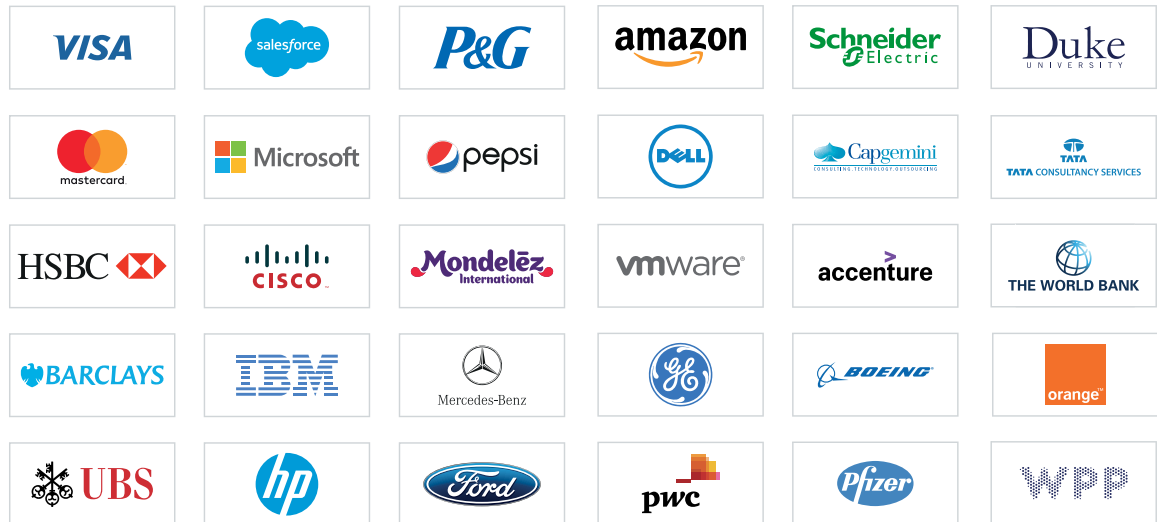
### Vikram Rahul Padamatinti

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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