



AZ-300

Microsoft Azure Architect Technologies

www.cognixia.com

About Cognixia

Cognixia- A Digital Workforce Solutions Company is dedicated to delivering exceptional trainings and certifications in digital technologies. Founded in 2014, we provide interactive, customized training courses to individuals and organizations alike, and have served more than 100,000 professionals across 37 countries worldwide.

Our team of more than 4,500 industry experts facilitate more than 400 comprehensive digital technologies courses, along with state-of-the-art infrastructure, to deliver the best learning experience for everyone. Our comprehensive series of instructor-led online trainings, classroom trainings and on-demand self-paced online trainings cover a wide array of specialty areas, including all of the following:

- IoT
- Big Data
- Cloud Computing
- Cyber Security
- Machine Learning
- AI & Deep Learning
- Blockchain Technologies
- DevOps

Cognixia is ranked amongst the top five emerging technologies training companies by various prestigious bodies. We're also an MAPR Advantage Partner, Hortonworks Community Partner, RedHat Enterprise Partner, Microsoft Silver Learning Partner and an authorized training partner for Dell EMC, Pivotal, VMware and RSA technologies.



OUR AWARDS & AFFILIATIONS

 **Best Workplace Amongst Emerging Enterprises** Awarded By
Great Indian Workplace Awards – 2018
Mumbai, India



 **Best Training Provider of the Year**
Awarded By
The Golden Globe Tiger Awards – 2018
Kuala Lumpur, Malaysia



World HRD Congress has awarded
for Excellence in Training (Asia) 

  **WORLD HRD CONGRESS**
Cognixia is awarded as
Training Company of the Year, 2018

  **ISO 9001:2015 CERTIFIED**
ISO 9001:2015 Certified
Quality Management System



  **ISO/IEC 27001:2013 CERTIFIED**
ISO/IEC 27001:2013 Certified
Information Security Management System

  **AFRICAC**
Best Emerging Technology Training Organization
at the Middle East Training &
Development Leadership Awards 2018

 **TOP 5 CLOUD TRAINING INSTITUTIONS INDIA 2016**  **HIGHER EDUCATION REVIEW**

 **TOP 5 Big Data TRAINING INSTITUTES 2017**  **siliconindia**

 **TOP 10 IoT TRAINING INSTITUTES PROMISING IN INDIA 2017**  **HIGHER EDUCATION REVIEW**

 Top 10 IoT Training Companies for the
Second consecutive year.  **2017 IoT India MAGAZINE**

 **siliconindia** BEST TRAINING PROVIDER
BIG DATA HADOOP DEVELOPER OF THE YEAR 2016

 Top 10 IoT Training Institutes – 2016
 **Analytics India MAGAZINE**

  **Asian Training & Leadership Award, Dubai**

 **TOP 5 Emerging Technologies TRAINING COMPANIES 2016**  **siliconindia**

AUTHORIZED TRAINING PARTNERS FOR



Red Hat



Silver
**Microsoft
Partner**



Who should study Microsoft AZ-300

Cognixia's prep course for AZ-300: Microsoft Azure Architect Technologies is designed for IT experts who are interested in honing their skills and expertise as a Microsoft Azure Solutions Architect. The market currently has a huge skills gap offering an opportunity for tech experts to further advance their career and passion for cloud computing. Additionally, this certification exam by Microsoft is one of the stepping stones towards becoming a Microsoft Certified Azure Solutions Architect.

This course is highly recommended for -

- IT professionals
- Cloud solution architects
- Experienced Azure administrators and developers
- DevOps professionals

Eligibility/Prerequisites

Prerequisites for this course include:

- Advanced experience and knowledge across various aspects of IT operations, such as, networking, virtualization, identity, security, business continuity, disaster recovery, data management, billing and budgeting, and governance.
- Proficiency in Azure administration, Azure development or DevOps and expert-level skills in at least one of these domains



The world of Microsoft Azure

Microsoft Azure is one of the fastest growing cloud platform in the market with a significant market share. Its growing popularity is courtesy its seamless integration with other products offered by Microsoft with an integrated environment for testing, developing, and deploying Cloud apps. It offers a choice of frameworks, and open development languages promoting flexibility for Azure migration.

Microsoft Azure is simplifying the cloud by not restricting cloud platform offerings only to developers. Furthermore, there is a consistency in the growth and improvement of the Microsoft Azure platform, with better accessibility to migration and other services.

Latest Industry Trends in Microsoft AZ-300

As per the Synergy Research Group Report, Microsoft Azure has a 13% global market share lead in public cloud services, which is second only to Amazon's AWS.

Microsoft Azure is growing at a rate of 120K new customers per month with 5 million organizations using Azure Active directory, 4 million developers registered with visual studio team services, 1.4 million SQL databases, 2 trillion message per week processed by Azure IoT and 40% of revenue generated from start-ups.

Tools and Frameworks used

- We provide 40 hours of online training with a live point of contact and hands-on assignments.
- An interactive, online, live session with an industry expert who serves as your technical trainer/instructor
- Dedicated technical team to answer your queries at any time, no matter where you are.

Course Objectives

After completing this training, you will be able to:

- Manage Azure subscriptions and resources
- Configure, deploy, and manage virtual machines and networks
- Implement and manage advanced virtual networking and application services
- Manage and secure identities
- Perform hybrid networking

Detailed Curriculum: Modules

Module 1: Deploying and Configuring Infrastructure

- **Managing Azure subscriptions and resources**
- **Implementing and managing storage**
- **Deploying and managing Virtual Machines (VMs)**
 - Create Virtual Machines (VM)s within the Azure Portal
 - Create Virtual Machines (VM)s using Azure PowerShell
 - Create Virtual Machines (VM)s using ARM templates
 - Deploy Linux Virtual Machines (VM)s
 - Monitor virtual machines (VM)s
 - Protect data using backups at regular intervals, whether by snapshot, Azure Backup, or Azure Site Recovery.
- **Configuring and managing Virtual Networks**
 - Network routing using routing tables and algorithms
 - Inter-site connectivity using VNet-to-VNet connections and VPNs
 - Virtual network peering for regional and global considerations
 - Gateway transit
- **Managing Identities**
 - Role-Based Access Control (RBAC)
 - Built-in roles
 - Self-Service Password Reset (SSPR)
 - Authentication methods for password reset

Module 2: Implementing Workloads and Security

- **Evaluating and performing server migration to Azure**
- **Implementing and managing application services**
 - Deploying web apps
 - Managing web apps
 - App service security
 - Serverless computing concepts
 - Managing event grid
 - Managing service bus
 - Managing logic apps
- **Implementing advanced virtual networking**
 - Azure load balancer
 - Azure application gateway
 - Site-to-Site VPN Connections
 - Overview of Express Route
- **Securing identities**
 - Azure AD identity protection
 - Azure domains and tenants
 - Azure users and groups
 - Azure roles
 - Overview of Azure AD integration options focusing on Azure AD

Detailed Curriculum: Modules

Module 3: Understanding Cloud Architect Technology Solutions

- **Selecting compute and storage solutions**
 - Azure architecture center
 - Cloud design patterns
 - Competing consumers pattern
 - Cache-aside pattern
 - Sharding patterns
- **Hybrid networking**
 - Site-to-site connectivity
 - Point-to-site connectivity
 - Combining site-to-site and point-to-site connectivity
 - Virtual network-to-virtual network connectivity
 - Connecting across cloud
- **Measuring throughput and structure of data access**
 - DTUs – Azure SQL database
 - RUs – Azure cosmos DB
 - Structured and unstructured data
 - Using structured data stores

Module 4: Creating and Deploying Apps

- **Creating web applications using PaaS**
 - Using shell commands to create an app service web app
 - Creating background tasks
 - Using swagger to document an API
 - Understand how Logic Apps help to build solutions
- **Creating apps and services running on service fabric**
 - Overview of Azure service fabric
 - Challenges in developing and managing cloud native applications
 - Creating a reliable service
 - Creating a reliable actors app
 - Working with reliable collections
- **Using Azure Kubernetes Service**
 - How to reduce operational overhead of managing Kubernetes
 - Azure container registry
 - Azure container instances

Detailed Curriculum: Modules

Module 5: Developing for the Cloud

- **Developing long-running tasks and distributed transactions**

- o Implementing large-scale, parallel, and high-performance apps using batches
- o HPC using Microsoft Azure virtual machines
- o Implementing resilient apps by using queues
- o Implementing code to address application events using webhooks

- **Configuring a message-based integration architecture**

- o Configure an app or service to send emails
- o Configure an event publish and subscribe model
- o Configure the Azure relay service
- o Configure apps and services with Microsoft Graph

- **Developing for asynchronous processing**

- o Implement parallelism, multithreading and processing
- o Implement Azure functions and Azure logic apps
- o Implement interfaces for storage or data access
- o Implement appropriate asynchronous computing models
- o Implement autoscaling rules and patterns

- **Developing for autoscaling**

- o Implementing autoscaling rules and patterns
- o Implementing code that addresses singleton application instances
- o Implementing code that addresses a transient state

- **Developing Azure cognitive services solutions**

- o Developing solutions using Computer Vision
- o Developing solutions using Bing web search
- o Developing solutions using custom speech service
- o Developing solutions using QnA Maker

- **Develop for Azure storage**

- o Develop solutions that use Azure Cosmos DB Storage
- o Develop solutions that use a relational database
- o Modeling a database by using Entity Framework Core
- o Develop solutions that use Microsoft Azure Blob

Cognixia USPs



LIFETIME LMS ACCESS



24 x 7 SUPPORT



REAL-LIFE PROJECTS & CASE STUDIES



INDUSTRY EXPERTS AS TRAINERS



INDUSTRY STANDARD CERTIFICATE



POTENTIAL CAREER OPTIONS

CLOUD SOLUTION ARCHITECT

TECHNOLOGY MANAGER

TECHNOLOGY TEAM LEADER



AZ-300

Microsoft Azure Architect Technologies



To learn more visit
www.cognixia.com