

# Create cloud native apps with Azure and open-source software Training

**Course Duration: 08 Hours**

**Course Code: AZ-CNA-301**

## 1. Course Overview

This course focuses on building, deploying, and managing cloud-native applications using Microsoft Azure and open-source tools. Learners will gain hands-on experience with containers, microservices, Kubernetes, and DevOps practices to create scalable, resilient, and modern applications in a cloud environment.

## 2. What You'll Learn

- Fundamentals of cloud-native architecture
- Working with Microsoft Azure services
- Containerization using Docker
- Orchestration with Kubernetes (AKS)
- Microservices architecture design
- CI/CD pipelines using open-source tools
- Monitoring, scaling, and securing applications
- Integration of open-source technologies with Azure

## 3. Target Audience

- Software Developers
- DevOps Engineers
- Cloud Engineers & Architects
- IT Professionals looking to upgrade cloud skills

- Students interested in cloud-native development

## 4. Pre-Requisites

- Basic knowledge of programming (Java, Python, or .NET)
- Understanding of web applications and APIs
- Familiarity with cloud concepts (preferred but not mandatory)
- Basic knowledge of Linux commands

## 5. Course Content

- Introduction to Cloud-Native Concepts
- Overview of Microsoft Azure Services
- Containers and Docker Fundamentals
- Kubernetes and Azure Kubernetes Service (AKS)
- Microservices and API Management
- DevOps and CI/CD Pipelines
- Infrastructure as Code (IaC)
- Monitoring and Logging with Azure Tools
- Security Best Practices
- Real-time Project & Case Studies