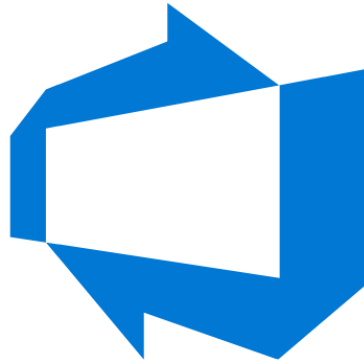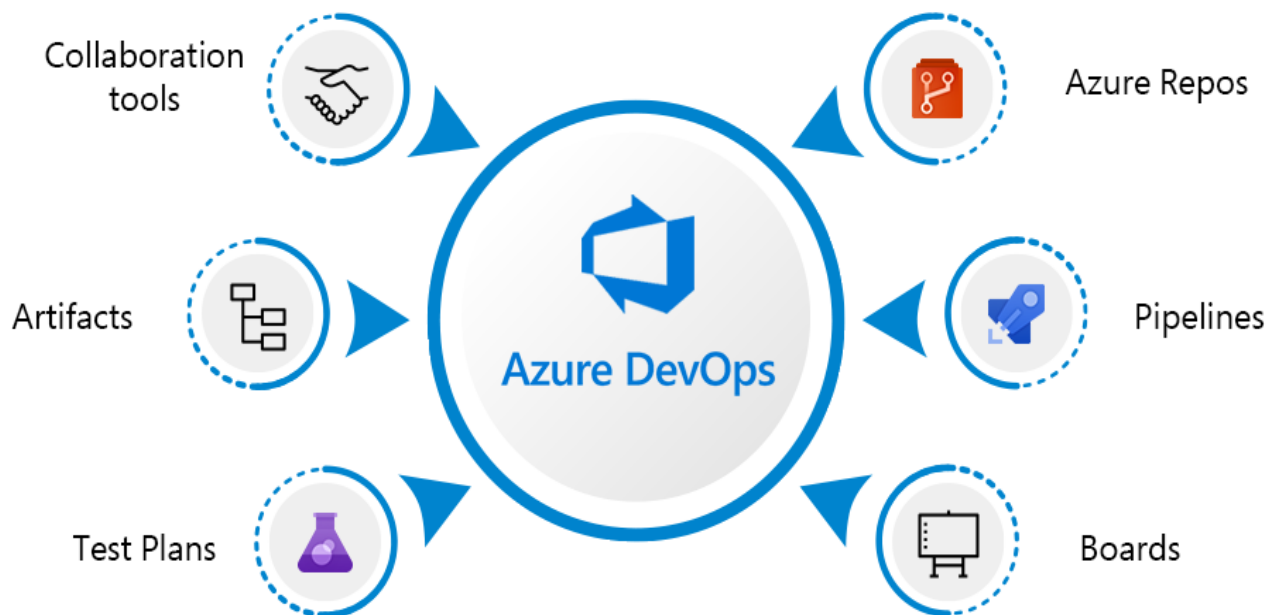# eMexo
TECHNOLOGIES

LEARN, THINK, INNOVATE

Azure DevOps

Overview

Let eMexo Technologies **Best Microsoft AZURE DevOps Training in Electronic City Bangalore** take you from the fundamentals of **Azure DevOps** to Advance **Azure DevOps** and make you an expert in developing real-time Azure DevOps services. Here are the major topics we cover under this course **Introduction to Microsoft Azure, Introduction to DevOps, Introduction to Microsoft Azure DevOps, Azure Resource Management, Azure Virtual Machines & Networking, Managing Azure Virtual Machines, Azure App Services & Its Features, Implementing Continuous Integration, Building Containers with Azure DevOps, Containerization with Docker, Configuration Management using Puppet, Configuration Management using Ansible, Continuous Orchestration using Kubernetes, Continuous Monitoring using Nagios, Azure DevOps & Azure Repos, Azure Artifacts & Azure Test Plans, Azure Pipelines, Azure Boards, Designing a Dependency Management Strategy & Managing Artifact Versioning, Setting up Release Management Workflow, Implementing Deployment Models & Services, Terraform with Azure, and Implementing Compliance & Security.** Every topic will be covered in the most practical way with examples for our Microsoft Azure DevOps Course in Electronic City Bangalore.

All the topics will be covered with Practical and hands-on training. Our trainers have industry experience with live project experience in cutting-edge technologies which they teach. We hire only the Best Azure Cloud industry specialists as trainers for our **Microsoft AZURE DevOps Certification Course in Electronic City Bangalore**.

If you are looking for Microsoft **AZURE DevOps Certification Training in Electronic City Bangalore**, eMexo Technologies is the **Best Microsoft AZURE DevOps Training Institute in Electronic City Bangalore**. Come over to our training institute for a free demo class. Let our trainer give you a demo on **Azure DevOps** and only then do you take the decision to enroll in the training program.

Training Features

Real-life Case Studies

Do a real-life case study to understand the usage in real-world scenarios.

Assignments

Each class will be followed by a practical assignment switch that can be completed before the next class.

Preparation for interview

Our trainers are professionals working in multinational corporations. They are experts in their field and they know exactly what the interviewer will look for in the candidate. Experienced trainers not only share interview questions but also conduct mock interviews to help prepare for the actual interview.

Key Features

eMexo Technologies offers the **Best Microsoft Azure DevOps Training Course in Electronic City Bangalore** with the TOP industry expert trainers.

Here are the key features.

★ Free Demo Class Available

★ Practical Approach

★ Expert & Certified Trainers

★ 100% Job Oriented Training

★ Real World use cases and Scenarios

★ Completed 500+ Batches

★ Certification Guidance

Unit 1: Introduction to Microsoft Azure

➢ Cloud computing overview

➢ What is Microsoft Azure?

➢ Microsoft Azure services

➢ Create a Microsoft Azure account

➢ Azure CLI, Azure PowerShell

➢ Manage Azure resources and subscriptions

➢ Azure resource manager

➢ Architecture of Microsoft Azure

➢ Hands-On

Unit 2: Introduction to DevOps

➢ What is software development?

➢ Software development lifecycle

➢ Traditional model of SDLC

➢ Why DevOps?

➢ What is DevOps?

➢ DevOps lifecycle

➢ DevOps tools

➢ Hands-On

Unit 3: Introduction to Microsoft Azure DevOps

➢ Overview of Azure DevOps

➢ Transformation plan overview

➢ Source control overview

➢ Migrate to Azure DevOps

➢ Git authentication with Azure Repos

➢ Git version control

➢ Hands-On

Unit 4: Azure Resource Management

➢ Manage and analyze Azure resources

➢ Diagnostics and basic environment

➢ Create alerts and metrics

➢ Manage costs

➢ Log analysis

➢ Hands-On

Unit 5: Azure Virtual Machines & Networking

➢ Azure Resource Manager Virtual Machine

➢ Virtual Machines in ARM Template

➢ Overview of Azure Virtual Machine

➢ Azure Managed Disks

➢ Azure Blob Storage

➢ Networking in Azure

➢ Subnets, NIC, NSG, IP Addresses, DNS

➢ Hands-On

Unit 6: Managing Azure Virtual Machines

➢ Adding Disks to Virtual Machines

➢ Add a Network Interface Card to a Virtual Machine

➢ Another VM size change

➢ Redeploying virtual machines

➢ Hands-On

Unit 7: Azure App Services & Its Features

- ➢ Azure App Service Web Apps

- ➢ App Service Security

- ➢ Serverless Computing Concepts

- ➢ Function Apps

- ➢ Azure Event Grid

- ➢ Azure Service Bus

- ➢ Azure App Service Logic App

- ➢ Using Shell Commands to create Web App

- ➢ Background Tasks

- ➢ Swagger tool

- ➢ Hands-On

Unit 8: Implementing Continuous Integration

- ➢ DevOps Pipeline

- ➢ Azure Pipeline

- ➢ Hosted and Private Agents

- ➢ Pipeline and Concurrency

- ➢ Azure Pipeline YAML and Visual Designer

- ➢ Continuous Integration

➢ Build Strategy Implementation

➢ Integrating Azure Pipelines

➢ Setting up Private Agents

➢ Analyze and Integrate Docker Multi-Stage Builds

➢ Hands-On

Unit 9: Building Containers with Azure DevOps

➢ Introduction to containers

➢ Orchestration overview

➢ Kubernetes overview

➢ Azure Kubernetes Service (AKS)

➢ Hands-On

Unit 10: Containerization with Docker

➢ Docker overview

➢ Understanding the Docker Lifecycle

➢ Components of the Docker ecosystem

➢ Common Docker operations

➢ Create a DockerHub account

➢ Commit changes to the container

➢ Push the container image to DockerHub

➢ Build a custom Docker image using a Dockerfile

➢ Hands-On

Unit 11: Configuration Management using Puppet

➢ Need for configuration management

➢ Configuration management tools

➢ What is a puppet

➢ Puppet architecture

➢ Setting up master-slave with Puppet

➢ Puppet manifest

➢ Puppet module

➢ Apply configuration with Puppet

➢ Puppet file server

➢ Hands-On

Unit 12: Configuration Management using Ansible

➢ What is Ansible?

➢ Ansible vs Puppet

➢ Ansible Architecture

➢ Setting up Master Slave using Ansible

➢ Ansible Playbook

➢ Ansible Roles

➢ Applying configuration using Ansible

➢ Hands-On

Unit 13: Continuous Orchestration using Kubernetes

➢ Introduction to Kubernetes

➢ Docker Swarm vs Kubernetes

➢ Kubernetes Architecture

➢ Deploying Kubernetes using Kubeadms

➢ Alternate ways of deploying Kubernetes

➢ YAML Files

➢ Creating a Deployment in Kubernetes using YAML

➢ Services in Kubernetes

➢ Ingress in Kubernetes

➢ Case Study – Kubernetes Architecture

➢ Hands-On

Unit 14: Continuous Monitoring using Nagios

➢ What is Continuous Monitoring?

➢ Introduction to Nagios

➢ Nagios Architecture

➢ Monitoring Services in Nagios

➢ What are NRPE Plugins?

➢ Monitoring System Info using NRPE plugins

➢ Hands-On

Unit 15: Azure DevOps & Azure Repos

➢ Azure DevOps architecture

➢ Key features

➢ Azure DevOps tools

➢ Azure DevOps organizations and projects

➢ Introduction to Azure Repos

➢ Compare TFVC and Git

➢ Key concepts in azure repos

➢ Search your code in Repos

➢ what is TFVC

➢ Azure Repos Integrations

➢ Hands-On

Unit 16: Azure Artifacts & Azure Test Plans

➢ What are Azure artifacts

➢ Key concepts in artifacts

➢ working with packages

➢ Feeds

➢ Views and upstream sources

➢ Connecting to azure pipelines

➢ What are Azure test plans

➢ Exploratory and manual testing

➢ Test from kanban board

➢ Creating Test Plans

➢ Testing web apps

➢ Hands-On

Unit 17: Azure Pipelines

➢ What is Azure Pipelines

➢ Why use Azure Pipelines

➢ Deploying to Azure

➢ Key concepts in Pipelines

➢ CI Triggers in pipelines

➢ YAML Basics

➢ Ecosystems and Integration

➢ Setting up CI build

➢ Adding Tests to the Pipeline

➢ Agents and Tasks

➢ Hands-On

Unit 18: Azure Boards

➢ What is Azure Boards

➢ Why use azure boards

➢ Agile project management best practices

➢ Basic concepts of Azure Boards

➢ Connecting boards to github

➢ Work items

➢ Kanban boards

➢ Sprints

➢ Scrum and plans

➢ Azure Boards integrations

➢ Hands-On

Unit 19: Designing a Dependency Management Strategy & Managing Artifact Versioning

➢ Package dependencies

➢ Package management

➢ Migrating and consolidating artifacts

➢ Package security

➢ Open-source software

➢ License and vulnerability scan integration

➢ Hands-On

Unit 20: Setting up Release Management Workflow

➢ Continuous Delivery

➢ Azure Release Pipeline

➢ Deployment Patterns

➢ Release Tools

➢ Tasks and Templates

➢ Integrating Secrets with Release Pipeline

➢ Automating Health Inspection

➢ Hands-On

Unit 21: Implementing Deployment Models & Services

➢ Deployment Modules and Deployment Options

➢ Azure IaaS and PaaS Services

➢ Serverless and HPC Computer Services

➢ Azure Service Fabric

➢ Deployment Patterns

➢ Hands-On

Unit 22: Terraform with Azure

➢ What is Infrastructure as a code?

➢ IaC vs Configuration Management

➢ Introduction to Terraform

➢ Basic Operations in Terraform

➢ Terraform Code Basics

➢ Deploying and end-to-end architecture on Azure using Terraform

➢ Hands-On

Unit 23: Implementing Compliance & Security

➢ Security

➢ Secure and Compliant Development Process

➢ Application Config Data

➢ Security and Compliance in a Pipeline

➢ Code Quality

➢ Security Policies

➢ Hands-On

FAQs

1. How is the training organized? How much percentage is theoretical and how much is practical hands-on?

We at eMexo believe nothing beats hands-on practice when it comes to learning a concept. Our teaching methodology is 100% practical and hands-on oriented. You learn a concept, you practice it then and there with the trainer. We also give you assignments for each topic which you can practice at home and any doubts regarding the topic can be cleared with the trainer the next day.

2. What is the course duration? How and when do you plan to complete the course?

We generally cover our courses in 30 hours, however, we are aware that we can't put a hard- stop to learning with a number. Our trainer will make sure that you have learned everything that is part of the curriculum. This could mean 28 hours or 35 hours, doesn't matter.

3. What is the material provided in the training?

We have industry standard course material which is used by our trainers to train you. At the end of the training apart from the notes which you have taken during the course, we will also provide you with the training material which was used. This training material includes the training content, interview questions, etc.

4. Do you help in preparing for the interview?

Our trainers are working professionals who work in MNCs. They are the expert in their domain and they know exactly what an interviewer looks into a candidate. Our expert trainers apart from sharing the interview questions will also conduct mock interviews to help you prepare for the real interview.

5. Who are your trainers?

Our trainers are industry experts who work in their respective technologies day in and day out. They work in MNCs and are technology experts within their organizations.

6. **What is the total batch size per course?**

We maintain a strict batch size of a maximum of 5 students. We also provide exclusive one-to-one training as well. Talk to our training partner to get more details.

7. Do you provide certification for the course?

Yes, at the end of training we provide a certification of completion.

8. Will I be joining a new batch or being merged with another batch?

You will be added to a new batch.

9. Is fast-track training available?

Yes, we provide fast-track training as well for those who want to complete the course faster. The curriculum and the total hours required to complete the course will remain the same. However, the trainer will be spending more hours with you to complete the course.

10. Do you assist in job placement?

Our trainers are expert professionals in their organizations and they often act as the interviewer to hire new candidates. Our trainers will help you prepare your resume with industry standards. After all, they know exactly what to look for in a resume.

11. Timings for training - Regular training/weekend training

We provide both regular and weekend training. Talk to our training partner to learn more about the timings.

12. Will you be working on a live project during training?

Yes, apart from doing the hands-on practice our trainer will also be taking a real-world project and working with you for the implementation.

13. What happens if I miss a class?

If you miss a class the content of that class will be taught to you again. With us, you might miss a class but not the content.

14. Can I attend a demo before the actual class?

Yes, absolutely! Talk to our training counselor on phone at **+91-9513216462** or email us at **info@emexotechnologies.com** to arrange a free demo. You can also fill in the contact us form below and we will call you to discuss your training requirements.