

*the*knowledgeacademy

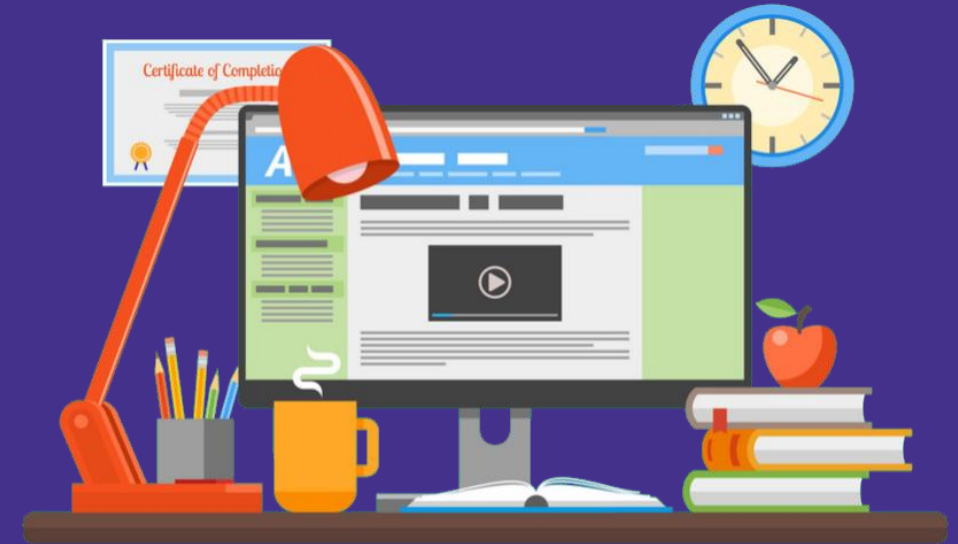
Certified DevOps Professional (CDOP)

New York – San Francisco – London – Sydney – Dubai – Singapore – Vancouver – Bangalore



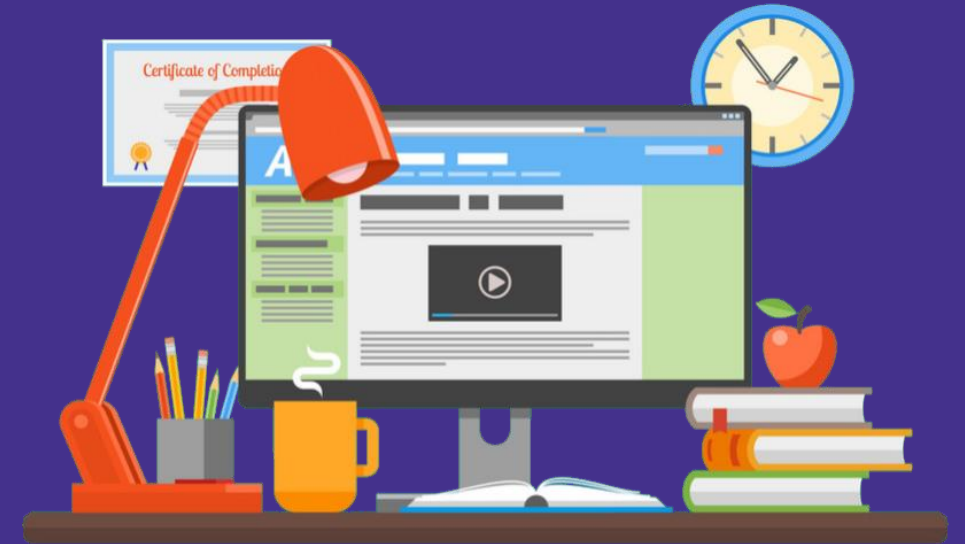
Contents

Contents	2
Certified DevOps Professional (CDOP)	4
Syllabus	5
Module 1: Overview of DevOps	6
Module 2: Version Control with Git	7
Module 3: Continuous Integration Using Jenkins	8
Module 4: Configuration Management Using Ansible	9
Module 5: Containerisation Using Docker	10
Module 6: Orchestration Using Kubernetes	12



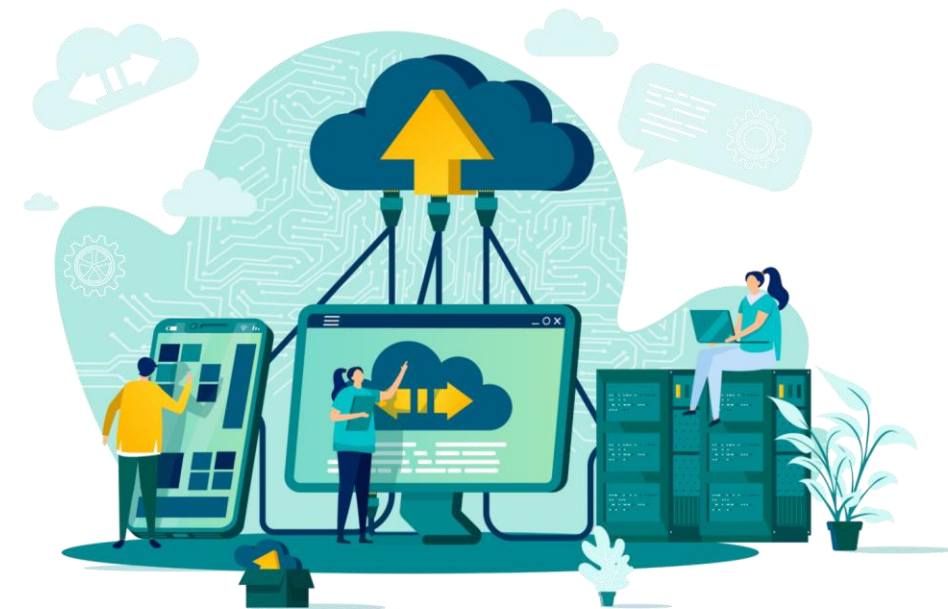
Contents

Module 7: Monitoring Using Grafana	13
Module 8: Selenium	13
Module 9: Nagios	14
Module 10: Build Tool – Maven	15
Module 11: DevOps on Clouds	16
Our Delivery Methods	18
Contact us	19



Certified DevOps Professional (CDOP)

- ✓ DevOps is the combination of software developers (Dev) and operations (Ops) that involves a set of cultural practises, philosophies, and tools to enhance an organisation's ability to deliver applications and services at high speed.
- ✓ This velocity enables businesses to compete in the market more effectively as well as better serve their clients. Studying this training will enhance an individual's technical skills and also increase their organisational ability to deliver services.
- ✓ In this Certified DevOps Professional (CDOP) Training Course, you will learn how to build a solid understanding of DevOps. During this training, you will learn about how to automate the software development and deployment processes to improve their overall efficiency and reduce the time and cost involved in delivering software products.
- ✓ At the end of this training, you will be able to use the latest trends and best practises in DevOps and implement them effectively in their own organisations. You will also be able to manage container services using Docker, which minimises delays between writing code and running it in production.





Syllabus

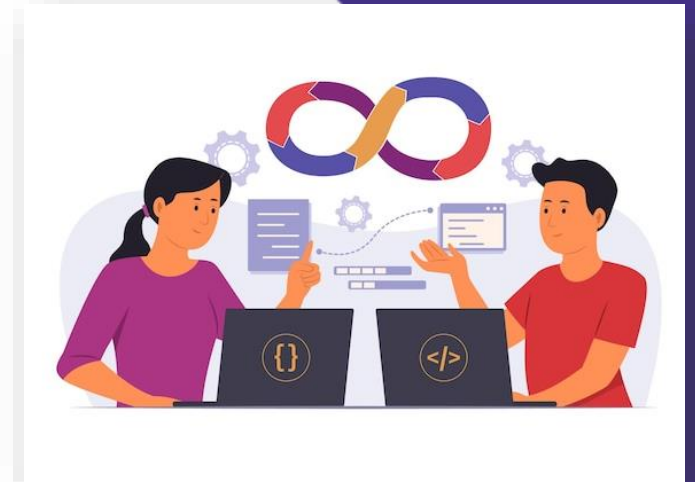
This course is split into 11 easy-to-understand modules, which will make you an expert in containerisation using docker, selenium, and DevOps on cloud.

- **Module 1: Overview of DevOps**
- **Module 2: Version Control with Git**
- **Module 3: Continuous Integration Using Jenkins**
- **Module 4: Configuration Management Using Ansible**
- **Module 5: Containerisation Using Docker**
- **Module 6: Orchestration Using Kubernetes**
- **Module 7: Monitoring Using Grafana**
- **Module 8: Selenium**
- **Module 9: Nagios**
- **Module 10: Build Tool – Maven**
- **Module 11: DevOps on Clouds**

Module 1

Overview of DevOps

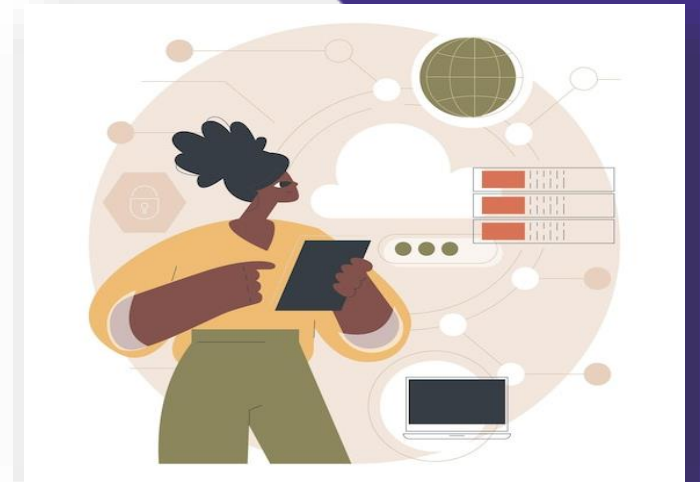
- Introduction to DevOps
- Benefits of DevOps
- DevOps Main Objectives
- DevOps and Software Development Life Cycle
- DevOps Stages
- DevOps Delivery Pipeline
- Waterfall Model
- Agile Model
- Vagrant
- Puppet
- Chef



Module 2

Version Control with Git

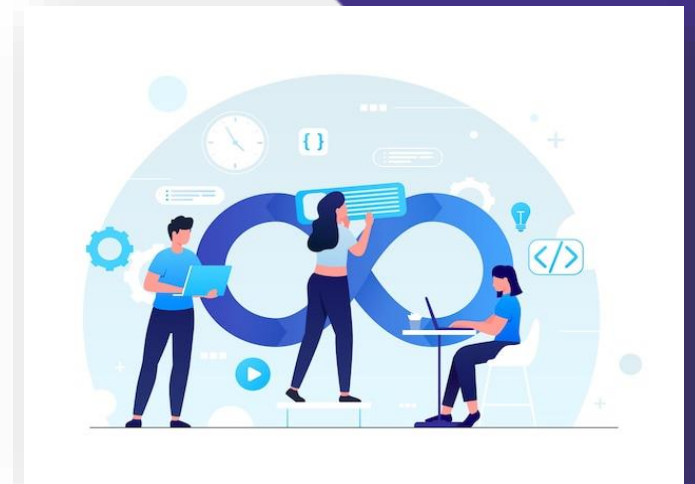
- Version Control
- Git Introduction
- Git Installation
- Commonly Used Commands in Git



Module 3

Continuous Integration Using Jenkins

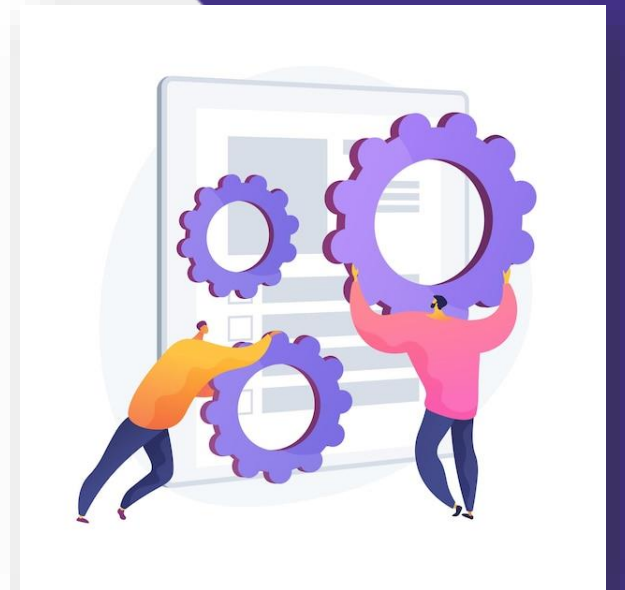
- Introduction to Jenkins
- Jenkins Architecture
- Different Types of Jenkins Jobs
- Installation Jenkins
- Plugin Management in Jenkins
- Notification in Jenkins
- Jenkins Master-Slave Architecture
- Jenkins Delivery Pipeline
- Jenkins Declarative Pipeline



Module 4

Configuration Management Using Ansible

- Introduction to Configuration Management
- Infrastructure as Code
- Introduction to Ansible
- Ansible Architecture
- Installation of Ansible
- Ansible Modules
- Ansible Roles



Module 5

Containerisation Using Docker

- Containerisation
- Docker
- Docker Architecture
- Install Docker
- Container Lifecycle
- Docker CLI
- Port Binding
- Detached Vs Foreground Mode
- Dockerfile
- Docker Image
- Docker Registry



Module 5

Containerisation Using Docker

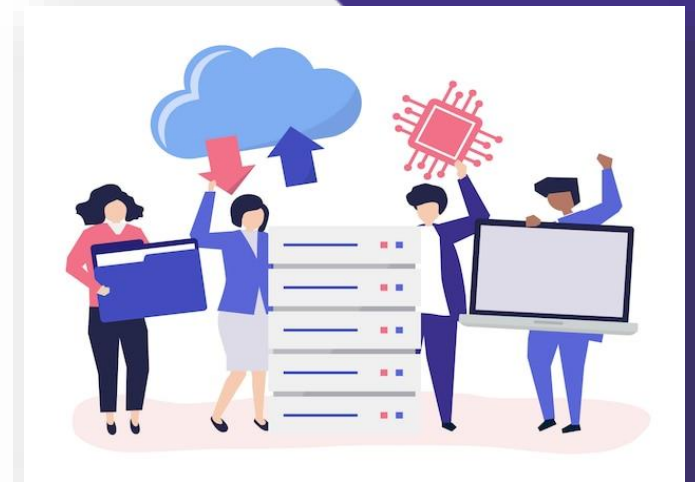
- Docker Storage
- Docker Compose
- Docker Swarm
- Docker Engine
- Docker Trust Registry (DTR)



Module 6

Orchestration Using Kubernetes

- Containerisation Orchestration
- Benefits of Containerisation
- Introduction to Kubernetes
- Architecture of Kubernetes
- Install Kubernetes
- Replication Controller
- Services and Labels



Module 7

Monitoring Using Grafana

- Introduction to Grafana
- Installation Grafana
- Dashboard Visualisation Using Grafana
- Creating a Dashboard to Monitor the Pipeline

Module 8

Selenium

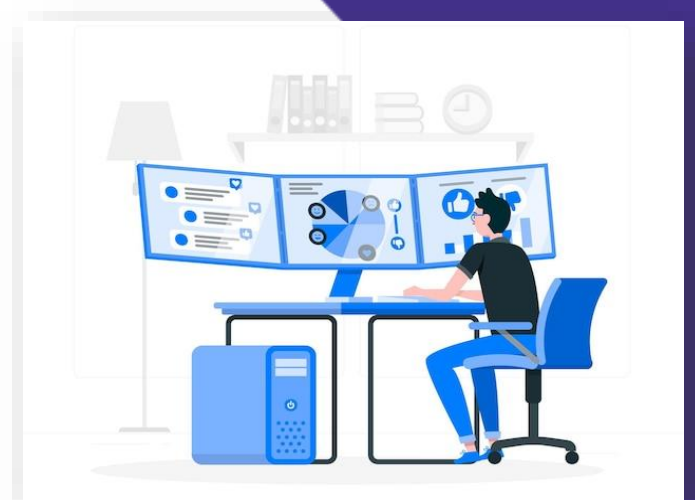
- Introduction to Selenium
- Why Selenium?
- Selenium Framework
- Selenium Components
- Setup Selenium with Python



Module 9

Nagios

- Introduction to Continuous Monitoring
- Introduction to Nagios
- Nagios Architecture
- Nagios NRPE
- Nagios Features



Module 10

Build Tool – Maven

- Introduction to Maven
- Maven Installation
- Building Project
- Maven Build Life Cycle
- Maven POM Builds (pom.xml)



Module 11

DevOps on Cloud

- What is Cloud?
- Introduction to Cloud Computing
- Evolution of Cloud Computing
- DevSecOps Overview
- Introduction to AWS
- Various AWS Services
- Code Infrastructures
- AWS Cloud Formation
- Creating an Application
- AWS Code Pipeline
- AWS Code Commit



Module 11

DevOps on Cloud

- AWS Code Build
- AWS Code Deploy
- AWS Code Star
- AWS Step Functions



Our Delivery Methods



POPULAR

Online Instructor-led

Join a scheduled class with a live instructor and other delegates. Ask questions, share documents, interact with whiteboards, ask live questions and communicate with your trainer and peers. Access the best pool of trainers, wherever you are.



POPULAR

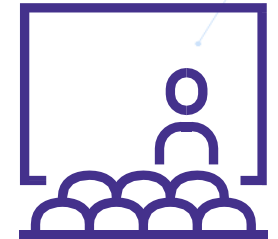
Online Self-paced

Learn at your own pace. Our expert trainers are on hand to help you with anything. All of our courses come with a standard 90 days access which can be upgraded if need be.. Our e-learning platform is available on all devices.



In-house

Our courses can be adapted to meet your individual project or business requirements. In-house training gives your team a great opportunity to come together, bond and discuss, which may be limited in a standard classroom setting.



Classroom

Some of our courses are available in our classrooms. All of our trainers are highly qualified, having 10+ years of experience. We use the highest quality learning facilities to make sure your experience is as comfortable as possible.

Have Questions for Us?

We are a leading training provider of highly-demanded learning programmes, and we always look forward to guiding learners in the right direction. If you have questions or need assistance while booking your training, you can access our 24/7 support using our email address and phone numbers. Our specialised learning advisors will get in touch and help you with your queries and needs by providing the correct information and guidance.

