

## DevOps Online Training Course

Our DevOps Course is designed to bridge the gap between development and operations, fostering collaboration, efficiency, and automation. Through hands-on projects and real-world scenarios, students learn to implement continuous integration, deployment, and monitoring. We cover essential tools like Jenkins, Docker, Kubernetes, and Ansible, while emphasizing industry best practices. Empower your career by mastering the principles and technologies of DevOps.

Course Duration: 35 To 45 Hours

Flexible Timing: Weekdays & Weekend

Minimum Batch Size

100 % Placement Assistance

### Key Features:

Instructor-led Live Online Training

Hands-on Learning

Flexible Schedules

Experienced Trainers

100% Job Assistance

Real-Time Projects

Study Materials

Interview Preparation Guidelines

Global Certification Support

### DevOps Course Prerequisites:

DevOps course prerequisites include a basic understanding of software development and operations. Familiarity with programming languages like Python or Java, version control systems like Git, and operating system concepts, especially Linux, is essential. Knowledge of networking, cloud platforms, and containerization tools like Docker is beneficial. Prior experience with Agile methodologies and basic automation concepts will also help in mastering DevOps practices.

## DevOps Course Syllabus

### 1. Introduction to DevOps

- What is DevOps?
- Core DevOps Principles
- Skills Needed for DevOps Engineers
- Understanding the DevOps Pipeline
- Current Trends in DevOps
- Common Challenges in DevOps
- Overview of DevOps Tools

### 2. DevOps on the Cloud

- Introduction to Cloud Computing
- Cloud and Virtualization Architecture
- Deployment Models
- Overview of Major Cloud Providers
- DevOps Benefits on the Cloud
- Intro to AWS and Cloud Services

### 3. Git — Version Control System

- What is Version Control?
- Getting Started with Git
- Core Git Commands
- Working with Branches
- Undoing Changes and Rollbacks

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- Collaborating with Git
- Popular Git Workflows
- Essential Git Tips and Shortcuts

## 4. Jenkins — Continuous Integration (CI)

- What is CI and Why Use Jenkins?
- Jenkins Architecture Overview
- Setting Up Jenkins
- User Management and Security
- Building Projects with Jenkins
- Jenkins Pipelines
- Integrating with Git
- Scaling Jenkins
- Plugin Management

## 5. Docker — Containerization

- Introduction to Containers
- Docker Basics
- Creating and Managing Containers
- Docker files
- Docker Hub
- Networking in Docker
- Docker Compose
- Introduction to Docker Swarm

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- **Practical Projects:** Build and deploy sample applications.

## 6. Kubernetes — Container Orchestration

- What is Kubernetes?
- Kubernetes Architecture
- Working with Pods
- Services and Networking
- Storage Solutions
- Managing Deployments
- Kubernetes Commands and Practice

## 7. Ansible — Configuration Management

- Introduction to Ansible
- Ansible Architecture
- Setting Up Inventory
- Basic Modules
- Running Ad-Hoc Commands
- Playbooks and YAML
- Using Handlers and Variables
- Creating and Using Roles
- Ansible Galaxy
- Managing Dependencies and Imports

## FAQ:

### 1. What is DevOps and why is it important in software development?

DevOps is a combination of development and operations practices that automates and integrates software development processes. It increases efficiency, collaboration, and faster delivery.

### 2. How does DevOps differ from traditional IT practices?

DevOps promotes a culture of continuous integration and deployment, where development and operations teams work together, breaking silos to enhance collaboration, automation, and speed.

### 3. What tools are commonly used in a DevOps environment?

Popular DevOps tools include Jenkins for CI/CD, Docker for containerization, Kubernetes for orchestration, Git for version control, and Ansible for configuration management automation.

### 4. What skills are required to become proficient in DevOps?

A DevOps professional needs skills in coding, version control, automation, cloud services, containerization, monitoring, problem-solving, and a deep understanding of Agile methodologies.

### 5. How does a CI/CD pipeline work in DevOps?

CI/CD automates software delivery, where Continuous Integration builds and tests code frequently, while Continuous Deployment automatically releases validated changes, ensuring reliability and speed.

### 6. What top companies have Jobs in DevOps?

Cognizant, Capgemini, IBM, Infosys, Oracle, Wipro, and More.