



**Become a professional**  
**Cloud & DevOps Engineer**  
with Average Salary Package of INR 6,00,000

**Curriculum Brochure**

# Cloud Computing & DevOps

## TRAINING

Cloud computing and DevOps are two rapidly growing fields in the technology industry, and the career scope for professionals in these areas is promising. Cloud computing refers to the delivery of computing services, including servers, storage, databases, networking, software, analytics, and intelligence, over the internet. DevOps, on the other hand, is a set of practices that combines software development and IT operations to accelerate the delivery of software products and services.

As more and more companies shift their operations to the cloud, the demand for cloud computing professionals continues to rise. This has created a huge career opportunity for individuals with skills in cloud computing, including cloud architecture, cloud security, cloud migration, and cloud management. Additionally, with the emergence of technologies such as serverless computing and containers, there is a need for skilled professionals who can help organizations leverage these technologies to drive innovation and efficiency.

Similarly, the adoption of DevOps practices has become essential for companies that want to remain competitive in the digital age. As a result, there is a high demand for professionals who can help organizations implement DevOps methodologies, including continuous integration, continuous delivery, and automation. DevOps professionals also need to have expertise in cloud computing, as most DevOps processes are implemented in the cloud.

As a Cloud & DevOps professional, you have different specialisations to work & you will have different options to start your career.

### **Middle Level Career Options**

After successfully completion of training, you can apply for various job roles, like

- Cloud Architect
- Cloud Operation Engineer
- AWS Solution Architect
- Automation Engineer
- DevOps Engineer
- Build and Release Engineer, etc.

### **Top Level Career Options**

After two to five years of experience, you can apply for job roles, like

- Cloud Consultant
- DevOps Consultant
- Project Manager
- Project Head
- Chief Technical Officer (CTO)

In conclusion, Cloud Computing and DevOps are two highly in-demand fields in the industry, and the career scope for professionals is promising. With the increasing adoption of cloud computing and DevOps practices, individuals with necessary skills and expertise will have numerous job opportunities in various industries and locations.

There are diverse  
**Career Options**  
in Cloud & DevOps

Why, You should choose

## Cloud & DevOps – As Career Option

### Increasing Demand

The demand of cloud computing and DevOps professionals is increasing rapidly because nowadays almost all the companies and startups are moving their infrastructure to the cloud platforms and adopting DevOps practices for the development of their products & services.

### Lot of Opportunities

It offers a lot of opportunities with career growth & stability. You can work as cloud architect, AWS solutions architect, build & release engineer, DevOps engineer, automation engineer and many more.

### Competitive Salaries & Benefits

The cloud computing and DevOps specialization offers competitive salaries and benefits. The cloud & DevOps professionals are getting above-average salaries and enjoying work benefits like remote job, flexible schedules, etc.

### Latest Technology Trends

The cloud & DevOps professionals always need to stay up-to-date with the latest tools & technology trends and also need to continuously improve their skills.

# Training Roadmap

## Cloud Computing & DevOps

Cloud computing enables companies to reduce the investment in purchasing expensive hardware and maintaining the infrastructure. Companies are paying for cloud services on the basis of pay & use and accessing the resources from anywhere to achieve remote working and collaboration. With DevOps, companies are maintaining development operations, deployment and release software updates & new features quickly and efficiently.

Linux &  
Shell Scripting

Cloud Computing  
& AWS

Version Control,  
Git & GitHub

Agile  
Development

Jenkins  
& Docker

Ansible  
& Kubernetes

## Available Training Programs to become a Cloud & DevOps Engineer

Program	Associate Program	Professional Program
<b>Duration Required</b>	3-4 Months	6 Months
<b>Level</b>	Intermediate	Expert
<b>Working Experience</b>	Not Applicable	3 Months
<b>Timings</b>	Week-days (Mon - Fri)	
<b>Activities</b>	Live Classes (Online / Offline), Doubts Sessions, Presentations, Minor Projects, Training, Assignments.	Live Classes (Online / Offline), Doubts Sessions, Presentations, Training, Assignments, Mock Interviews, Project Work
<b>Amenities</b>	Video Resume, Portfolio, Working Experience* (based upon projects), Interview Questions, Technical Support, Job Notifications.	
<b>Outcome</b>	Valid Certifications	Valid Certification & Experience

### Benefits / Perks with Learn2Earn Labs Training Program



Hands-On  
Training



Working  
Experience



Valid  
Certification



Corporate  
Connections



Attractive  
Portfolio



Video  
Resume



Professional  
Development



Interview  
Preparation

# Cloud & DevOps Training Program

This program is designed to train students with the skills and experience to work with virtual machines, cloud services, containers, version control system & DevOps tools.



## Practical Based Sessions

Training program available in four months & six months duration



## Dummy Projects

To build your hands-on expertise & portfolio



## Resume Building Assistance

To create an attractive resume for your candidature



## Interview Preparation

So you can present your skills in a better way



## Mentoring & Job Assistance

To help you in getting good career or placements

## Who can join

Any graduate or post graduate student from B.tech or M.tech (any specialization), BCA or MCA, B.Sc. or M.Sc. (CS / IT) can join the Cloud Computing & DevOps training program . The student must have hands-on experience with operating system with basic knowledge of shells or windows commands.

Any working professional, belongs to computer science or IT specialization, having some experience in IT or related industry and now looking for salary hike or promotions can also join the Cloud Computing & DevOps training program.

## Training Mode

### Online Live Classes are available

- 4x more effective way of learning
- Hands-on experience with projects & assignments
- Virtual class with real interaction with trainer
- Monitoring support & troubleshooting issues
- Masterclass from industry experts & leaders
- Live class recordings for revision purpose

## Cloud Computing & DevOps Training in Agra



### Learn2Earn Labs

F-4, First Floor, Anna Ikon Complex, In Front of Deviram Food Circle, Sikandra-Bodla Road, Sikandra, Agra, Uttar Pradesh – 282007

Call : +91-9548868337

# Training Modules

## Objectives :

The objective of a comprehensive cloud computing and DevOps training program is to provide learners with a strong foundation in the key concepts, principles, and best practices of cloud computing and DevOps, as well as practical skills in using Linux, AWS, GitHub, Jenkins, Docker, Ansible, and Kubernetes. The training program will cover topics such as cloud computing models, virtualization, networking, security, storage, and database services, as well as DevOps principles, methodologies, and tools for automation, continuous integration and delivery, and monitoring and testing.

Learners will gain hands-on experience in deploying and managing cloud-based applications using Linux as the primary operating system, and will learn how to provision and configure AWS resources, such as EC2 instances, S3 buckets, and RDS databases, using the AWS Management Console and the AWS CLI. They will also learn how to use Github for version control and collaboration, Jenkins for continuous integration and delivery, Docker for containerization, Ansible for configuration management and automation, and Kubernetes for container orchestration and scaling.

By the end of the training program, learners will have the necessary skills and knowledge to design, deploy, and manage cloud-based applications using a range of tools and technologies, and will be able to apply DevOps principles and best practices to improve software development and delivery processes. They will also be prepared to take relevant certification exams, such as the AWS Certified Solutions Architect, AWS Certified DevOps Engineer, and Certified Kubernetes Administrator certifications.

## Module 1 : Linux

Introduction to Linux, Linux Distributions & Shell, Virtual Machine & Installation, vim editor, Linux Commands, Directory Structure, File System, User Management, Group Management, Password Properties, Managing Permissions, ACL, Managing Processes, Managing Partitions, Managing Softwares, Links & Tar, Logs, Logical Volume Manager, Scheduling Tasks, Kernel, Http Configuration, Firewall Configuration, Password Resetting, Shell Scripting.

## Module 2 : Cloud Computing & AWS

Introduction to AWS & Cloud Computing, IAM, Roles, Policies and Access Management, Billing Dashboard & Free Tier Services, EC2 Fundamentals, Instance creation, SSH, AMI Types & Security Key Pairs, S3 Buckets & objects, storage classes, Load Balancing, access lists & policies, security & encryption, cross region replication, s3 versioning control, AWS snowball, CloudFront, AWS Databases, Dynamo DB, Redshift, Aurora, RDS Instance, RDS Encryption & Security, RDS Backups, ElastiCache, CloudWatch & Cloud Trail, Virtual Private Cloud (VPC), NAT Gateway, Network ACL, VPN & VPC, VPC Endpoints, Route 53, AWS Lambda & API Gateway.

### **Module 3 : Agile & DevOps**

Introduction to Software Development, Development Models (Waterfall, Iterative, Spiral, RAD, Agile, etc.), Agile Development Model, Introduction to DevOps, DevOps Life Cycle & DevOps Tools.

### **Module 4 : Git & GitHub**

Introduction to Version Control & Git, Command Line Interface, GitHub & Repositories, staging, cloning, push operation, branching, merging, forking & pull requests.

### **Module 5 : Jenkins**

Introduction to Continuous Integration & Jenkins, Jenkins Installation, Dashboard Overview, Job Creation, Search Panel, Jenkins Configuration, Jenkins Plugin, Role Base Access, Git Integration, Trigger Build, Build Periodically, Poll SCM, Environment Variables, Parameterized Jobs, Code Coverage, Timeout & TimeStamp, Job Management, User Management, Jenkins Logs Custom Workspace, Upstream / Downstream Jobs, Pipelining, Continuous Deployment, Continuous Delivery, Parallel Jobs, Master Slave, Input Parameters, Post Actions, Slack Notifications.

### **Module 6 : Ansible**

Introduction to YAML & Ansible, inventory, playbook, modules, variables, control flow (conditions & loop), Roles, Asynchronous Actions, Polling, Strategies, Error, Ansible Vault, LookUps, Custom Module.

### **Module 7 : Docker**

Introduction to Container, Container Vs Virtual Machine, Introduction to Docker, Installation & Environment, Commands, Objects, Registry, DockerHub, Docker Compose, Docker Swarm, Architecture, Files, Images, Storage & Volumes, Drivers, Networks, Monitoring.

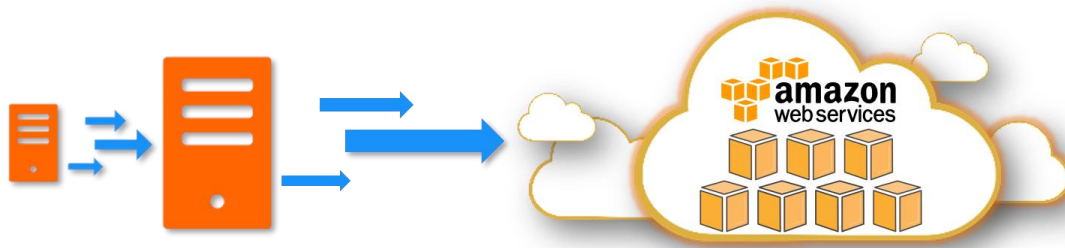
### **Module 8 : Kubernetes**

Introduction to Kubernetes, Architecture Overview, Pod & Kubectl, Pod's Container, Cluster IP, Node Port, Replication Controller, Deployment in Kubernetes, Kubernetes Rollout, Resource Request & Resource Limits, Namespace, Service DNS, Resource Quota, Limit Range, Config Map, Kubernetes Secret, taint & toleration, Scheduling & Volume Overview.

### **Module 9 : Project Work & Exercises**

Project work and practical exercises are essential components of AWS and DevOps training as they provide hands-on experience and real-world scenarios that cannot be replicated through theoretical learning alone. By applying concepts and techniques learned in the classroom to actual projects and exercises, students gain a deeper understanding of how to design, implement, and manage cloud-based infrastructures and DevOps practices effectively.

## AWS - Project Work & Exercises



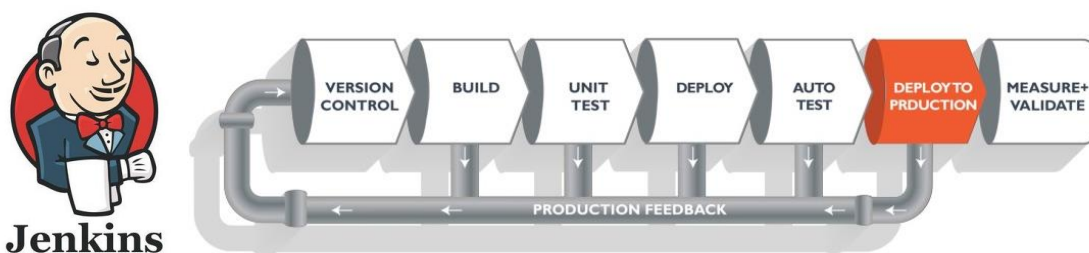
**Deploy a website:** Use Amazon S3 to host a static website, and Amazon CloudFront to distribute content to users around the world. You can also use Amazon Route 53 for DNS management and SSL certificate creation.

**Set up an auto-scaling group:** Create an auto-scaling group that can automatically increase or decrease the number of EC2 instances based on traffic demands.

**Implement security controls:** Configure security controls such as network access control lists (ACLs), security groups, and AWS Identity and Access Management (IAM) policies to secure your AWS infrastructure.

**Serverless application development:** Use AWS Lambda to develop a serverless application that can respond to events triggered by AWS services such as Amazon S3, Amazon DynamoDB, or Amazon Kinesis.

## Jenkins - Project Work & Exercises



**Create a build pipeline:** Develop a Jenkins build pipeline that can build, test, and deploy an application automatically. Use plugins like the Pipeline plugin, Build Pipeline plugin, and Delivery Pipeline plugin to implement the pipeline.

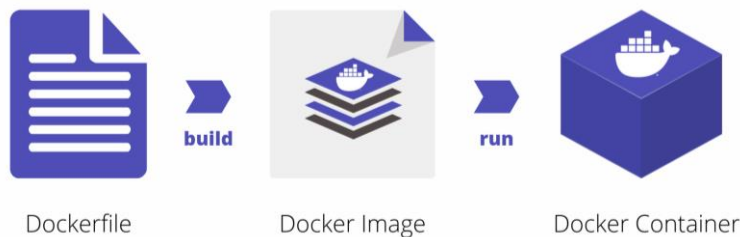
**Set up a continuous integration (CI) server:** Install and configure Jenkins as a CI server, and integrate it with version control systems like Git or SVN. Configure Jenkins to build and test the application automatically whenever changes are pushed to the repository.

**Implement code quality checks:** Use Jenkins plugins such as PMD, Checkstyle, and FindBugs to implement code quality checks in your build pipeline. Analyze the code for potential issues and generate reports to identify and resolve them.

**Configure job scheduling:** Use Jenkins to schedule and automate tasks like backups, database cleanups, or system maintenance. Use plugins like the Jenkins Job Scheduler plugin to configure job scheduling.



## Docker - Project Work & Exercises



**Containerize a web application:** Dockerize a web application by creating a Docker image and running it in a container. Use a Dockerfile to specify the application dependencies and environment, and Docker Compose to manage multiple containers.

**Create a custom Docker image:** Create a custom Docker image that includes your application and its dependencies. Use Docker build commands to create an image, and push it to a Docker registry like Docker Hub.

**Run a microservices architecture:** Use Docker to run a microservices architecture where each microservice is deployed in a separate container. Use Docker Compose to manage the containers and set up communication between them.

**Set up a development environment:** Use Docker to set up a development environment that can be easily replicated across multiple machines. Use Docker Compose to configure the environment and ensure consistency across development teams.

## Kubernetes - Project Work & Exercises



# kubernetes



**Deploy a simple web application:** Use Kubernetes to deploy a simple web application that includes a load balancer, a set of pods running the application, and a database. Use Kubernetes YAML files to specify the deployment and service configurations.

**Scale up and down application replicas:** Use Kubernetes to scale up and down application replicas based on demand. Use Kubernetes HPA (Horizontal Pod Autoscaler) to automatically scale the number of replicas based on CPU usage.

**Implement stateful application:** Use Kubernetes to deploy a stateful application such as a database. Use Kubernetes StatefulSets to ensure ordered deployment and scaling of the application.

**Monitor application metrics:** Use Kubernetes to monitor application metrics such as CPU and memory usage, network traffic, and more. Use Kubernetes metrics-server to collect metrics from your application and use Prometheus to visualize the metrics.

# Frequently Asked Questions

## **1. How this training program will help me to get a placement with handsome salary?**

Our training program is designed as per the requirements of business industries and latest trends. During training you will get a deep practical exposure of cloud computing, DevOps & related technologies along with the experience of working on dummy projects. You will be able to work on virtual machines, CI/CD pipeline, containers, project monitoring and can also lead or supervise other people to work on those dummy projects. With your skills, experience and abilities, you can get offer from any renowned organization.

## **2. Why should I choose Cloud & DevOps as a career option?**

The demand of cloud computing and DevOps professionals is increasing rapidly because nowadays almost all the companies and startups are moving their infrastructure to the cloud platforms and adopting DevOps practices for the development of their products & services.

It offers a lot of opportunities with career growth & stability. You can work as cloud architect, AWS solutions architect, build & release engineer, DevOps engineer, automation engineer and many more.

The cloud computing and DevOps specialization offers competitive salaries and benefits. The cloud & DevOps professionals are getting above-average salaries and enjoying work benefits like remote job, flexible schedules, etc.

## **3. What kind of jobs, will I get after completing this training?**

After successfully completion of the training program you would be able to work with renowned companies on various roles like Cloud Architect, Cloud Operation Engineer , AWS Solution Architect, Automation Engineer, DevOps Engineer, Build and Release Engineer, etc.

## **4. What would be the salary, I will receive after completing the training?**

Cloud & DevOps are one of the demanding professionals in the corporate industries and their demands are increasing every year. After successfully completing the training you would be one of them and can get an average salary of Rs. 6 LPA or more.

## **5. Will you provide me, Job Assurance or Job Guarantee?**

Yes, We can give you Job Assurance to have a decent job offer. Only you need to attend all the classes or practical session with at-least 80% attendance, complete the assignments, appear in test series, professional development sessions & mock-interviews, work on dummy projects, etc. You must be holding a valid degree in the related domain.

## **6. Can I attend demo classes after getting enrolled for the training program?**

Yes, You can attend the demo classes. Usually, we provide demo classes (up to 3 classes) for fresher and new candidates so they can understand the overall curriculum, clear their doubts, and make sure that the training would be worthy and useful. After demo classes, you can register yourself for the training program.

## **7. Why should I join Learn2Earn Labs instead of joining any other institute?**

It's always difficult to find a good institute or a mentor. At Learn2Earn Labs, it's our responsibility to give you a perfect environment to learn, develop your skills & find your talent. At Learn2Earn Labs, we know that you are enough capable to do anything, only you need a guidance & support to improve your skills and practical knowledge.

Learn2Earn Labs will provide you an additional training in professional development depending upon your requirements, which will help you in getting your dream job.

## **8. How I can pay for my training? Do you offer part payment facility & any EMI plan?**

Other than Pay-In-Cash option, any mode of payment is allowed whether it would be UPI, NEFT, Account Transfer, Cheque or Demand Draft.

Yes, we offer part payment facility (with extra 15% processing fee) to reduce your one-time financial burden.

## **9. Will you provide support or solve my queries after completion of the training?**

Yes, we always provide life time assistance support to our students. Whether you want to go for a good job or interview, or want to switch your job or looking for promotion, or looking for some part time income or outsource any project/work, or thinking about to start your own coaching/training business then we will guide you and support you.

## **10. Will you provide me working experience, If I will get enrolled with this training?**

Yes, we will provide you working experience of three months so you can apply on those jobs where some experiences are required. We only provide experience letter to those who join our training programs for at-least six months duration and worked on our dummy project.

## **11. What would be the admission criteria? How I can join this training program?**

After attending the demo classes, you can ask the concern person/faculty to process your enrolment. Then you need to submit the initial amount along with the registration fee. After that you are required to fill our registration form, submit your academic marksheets & degree (scanned copies) and a declaration from to declare that all your information is correct.

## **12. Will I get incentives, if I will work on your client's project?**

Definitely, nothing is free in this world and we also know it very well. We will provide you incentives and reimbursement depending upon your performance & client reports.

## **13. Will you provide me notes, case studies & other training material?**

Yes, we will provide you digital notes for your better learning & revision, job sheets, assignment samples, project report templates, presentation templates and many more.

## **14. Will you provide me the course completion certificate?**

Yes, we will provide you an industry recognized certificate after successfully completing this "Cloud Computing & DevOps" training program.



## Learn2Earn Labs

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