

GETIN TECHNOLOGIES

KOVILPATTI (HEAD OFFICE) - 8925831826 | VIRUDHUNAGAR - 8925831828 | TIRUNELVELI- 8925831821 | TUTICORIN - 8925831824 | COIMBATORE -8925831822 | BANGALORE - 8925831823 | CHENNAI - 8925831821

COURSE NAME: KUBERNETES TRAINING

Visit our website for Course Fees and Course Duration Placement Eligibility: Eligible: Any Bachelor Degree, Any Master Degree, MBA Not Eligible: Diploma

Class Mode: Classroom | Online | Recorded Session | AI Session

If you have Completed Course, You want only Placements +91 8925831829

Training Partnership with

Placement Partnership with



R A M A U S S Y S



TECHNOLOGIES

Head Office Address: Door No: 971G/6, 1st Floor, Kalki Street, Manthithoppu Road, Krishna Nagar, Kovilpatti - 628502.

GST No: 33ABAFG2025J1ZV Website: www.getintech.in Email: enquiry@getintech.in

KUBERNETES COURSE SYLLABUS

Introduction to Kubernetes

- Overview of Kubernetes
- Key Kubernetes concepts
- Kubernetes ecosystem and CNCF

Kubernetes Architecture

- Master and worker nodes
- Control plane components (API server, etcd, scheduler, controller manager)
- Node components (Kubelet, Kube Proxy, container runtime)

Installing and Configuring Kubernetes

- Setting up a local development cluster (e.g., Minikube)
- Installing Kubernetes on cloud platforms (e.g., AWS, Azure)
- Configuration files and tools (kubectl)

Deploying and Managing Containers with Kubernetes

- Service and networking in Kubernetes
- ConfigMaps and Secrets

Scaling and Load Balancing

- Horizontal Pod Autoscaling (HPA)
- Cluster scaling and multi-cluster strategies
- Load balancing with Services

Persistent Storage in Kubernetes

- Persistent Volume (PV) and Persistent Volume Claim (PVC)
- Storage Classes
- StatefulSets

Configuring and Managing Applications

- Application configuration with ConfigMaps and Secrets
- Rolling updates and rollbacks
- Liveness and readiness probes

Helm and Package Management

- Introduction to Helm
- Helm charts and releases
- Managing applications with Helm

Kubernetes Networking

- Service networking (ClusterIP, NodePort, LoadBalancer)
- Ingress controllers
- Network policies

Security in Kubernetes H N O L O G I E S

- Role-Based Access Control (RBAC)
- Pod security policies
- Secrets management and encryption

Monitoring and Logging

- Kubernetes monitoring with Prometheus
- Logging with Fluentd and Elasticsearch
- Metrics and alerting

Backup and Disaster Recovery

- ETCD backup and restore
- Disaster recovery strategies
- Backup tools and practices

Multicluster and Hybrid Kubernetes

- Federation of clusters
- Hybrid cloud Kubernetes
- Multi-cluster management tools

GETIN TECHNOLOGIES