



# CloudBridge DevOps Consulting

## DevOps Engineering — Complete Program

End-to-end DevOps mastery from Linux fundamentals to production deployment. CI/CD, Docker, Kubernetes, Jenkins, GitHub Actions, ArgoCD, Prometheus, Grafana — build and ship real production applications.

Duration	Mode	Fee	Placement
12 Weeks	Live Online + Offline (Hyd)	Rs 80,000 (one-time)	100% Assurance

**Designed for:** Australia | United States | Canada | Singapore | Germany | India (Offline)

**Target Audience:** Onsite Professionals | Domain Change Professionals | IT Engineers

### Tools & Technologies Covered:

Linux | Git | GitHub | GitLab | Docker | Kubernetes | Helm | Jenkins | GitHub Actions | ArgoCD | Ansible | Terraform | Prometheus | Grafana | ELK/EFK | AWS EKS | Azure AKS

### Contact Us

Phone: +91 7993 822600 | WhatsApp: wa.me/917993822600

Address: 506, Manjeera Majestic Homes, Kukatpally, Hyderabad, Telangana 500072

# Detailed Curriculum

## Module 1

### DevOps Fundamentals, Culture & Linux

#### Topics

- Introduction to DevOps: History, Evolution & Benefits
- DevOps Culture, Practices & Core Principles
- DLC vs DevOps Lifecycle
- DevOps Toolchain Overview & Tool Selection
- Agile, Lean & DevOps Integration
- Key Metrics: DORA Metrics, Lead Time, MTTR, Change Failure Rate
- DevOps Transformation Roadmap
- Introduction to AI in DevOps: Overview & Use Cases
- Essential Linux Commands for DevOps
- Shell Scripting & Automation Basics
- Networking Fundamentals: DNS, TCP/IP, HTTP/HTTPS

#### Hands-on Practice

- Set up DevOps learning environment
- Create DevOps maturity assessment
- Design a DevOps transformation roadmap
- Calculate DORA metrics from case studies
- Practice Linux commands and shell scripting
- Explore AI tools landscape for DevOps

## Module 2

### Version Control — Git, GitHub & GitLab

#### Topics

- Git fundamentals: init, commit, branching, merging, rebasing
- GitHub/GitLab workflows & pull request strategies
- Monorepo vs multi-repo architecture decisions
- Git hooks, pre-commit, pre-push automation
- Protected branches & code review best practices
- Branching strategies: GitFlow, Trunk-based development
- Conflict resolution & advanced Git commands (cherry-pick, bisect)
- Repository security, access management, signed commits

#### Hands-on Practice

- Set up multi-branch workflow
- Configure branch protection rules
- Implement GitFlow on a real project
- Create and manage pull requests with reviews
- Set up Git hooks for code quality enforcement

## Module 3

### Docker & Containerization

#### Topics

- Docker architecture: Engine, daemon, client, registry
- Container lifecycle management
- Dockerfile best practices & multi-stage builds
- Docker networking: bridge, host, overlay, macvlan
- Docker volumes & persistent storage strategies
- Docker Compose for multi-container applications
- Container registry management: ECR, Docker Hub, Harbor
- Docker security: rootless containers, image scanning
- Container optimization & slim images (distroless, Alpine)

#### Hands-on Practice

- Containerize a full-stack application
- Build optimized multi-stage Docker images
- Set up Docker Compose for microservices
- Push images to cloud container registries
- Implement container security scanning

# Detailed Curriculum (continued)

## Module 4

### Kubernetes & Container Orchestration

#### Topics

- Kubernetes architecture: control plane, etcd, kubelet, kube-proxy
- Pods, Deployments, ReplicaSets, DaemonSets, StatefulSets
- Services: ClusterIP, NodePort, LoadBalancer, ExternalName
- Ingress controllers & Ingress resources (NGINX, Traefik)
- ConfigMaps, Secrets & environment management
- RBAC, NetworkPolicies & Pod Security Standards
- Helm charts & package management
- EKS / AKS / GKE cluster provisioning & management
- Horizontal & Vertical Pod Autoscaling, Cluster Autoscaler
- Persistent Volumes, Storage Classes, CSI drivers
- Kubernetes troubleshooting & debugging techniques

#### Hands-on Practice

- Deploy application on EKS cluster
- Configure Ingress with TLS termination
- Implement RBAC and NetworkPolicies
- Create and deploy Helm charts
- Set up HPA and Cluster Autoscaler
- Troubleshoot real-world cluster issues

## Module 5

### CI/CD Pipelines — Jenkins & GitHub Actions

#### Topics

- CI/CD concepts, pipeline architecture & best practices
- Jenkins: Installation, pipeline-as-code, Jenkinsfile
- Jenkins shared libraries & plugin management
- GitHub Actions: Workflows, jobs, steps, reusable actions
- GitHub Actions marketplace & custom actions
- Build automation: Maven, Gradle, npm, pip
- Artifact management: JFrog Artifactory, Nexus, GitHub Packages
- Pipeline security: Secret scanning, signed artifacts
- Multi-environment deployment strategies

#### Hands-on Practice

- Build end-to-end Jenkins pipeline
- Create GitHub Actions CI/CD workflow
- Configure multi-stage deployment pipeline
- Set up artifact repository and versioning
- Implement pipeline security with secrets management

## Module 6

### GitOps with ArgoCD

#### Topics

- GitOps principles & declarative infrastructure
- ArgoCD architecture: Application, Project, Repository
- ArgoCD installation and configuration on Kubernetes
- Application deployment with ArgoCD
- Sync policies: Manual, automatic, self-heal, prune
- Blue-green deployments with ArgoCD Rollouts
- Canary deployments & progressive delivery
- Multi-cluster management with ArgoCD
- ArgoCD notifications and alerting

#### Hands-on Practice

- Install ArgoCD on EKS cluster
- Deploy application using GitOps workflow
- Configure auto-sync with self-heal
- Implement blue-green deployment with Rollouts
- Set up canary deployment with traffic splitting

# Detailed Curriculum (continued)

## Module 7

### Monitoring, Logging & Observability

#### Topics

- Prometheus: Architecture, metrics, PromQL queries
- Grafana: Dashboards, panels, alerting, plugins
- ELK Stack: Elasticsearch, Logstash, Kibana
- EFK Stack: Elasticsearch, Fluentd/Fluent Bit, Kibana
- Distributed tracing with Jaeger/Zipkin
- Log aggregation strategies and retention policies
- Alert fatigue management & escalation policies
- AIOps and intelligent anomaly detection

#### Hands-on Practice

- Deploy Prometheus + Grafana on Kubernetes
- Create monitoring dashboards for applications
- Set up alerting rules with Alertmanager
- Deploy EFK stack for centralized logging
- Configure distributed tracing

## Module 8

### Ansible & Configuration Management

#### Topics

- Ansible architecture: Control node, managed nodes, inventory
- Playbooks, roles, tasks, handlers, templates
- Ansible Galaxy: Sharing and reusing roles
- Dynamic inventory for cloud environments
- Ansible Vault for secrets management
- Ansible Tower / AWX for enterprise management
- Idempotency and configuration drift management

#### Hands-on Practice

- Write Ansible playbooks for server configuration
- Create reusable Ansible roles
- Configure dynamic inventory for AWS
- Manage secrets with Ansible Vault
- Automate application deployment with Ansible

# Capstone Project

Every student completes a **full end-to-end production deployment project** — from application inception through CI/CD pipeline creation, security scanning, infrastructure provisioning, container orchestration, monitoring setup, and production release. This is NOT a demo — this is a real production-grade deployment.

- Complete application code to multi-cloud production deployment
- Automated CI/CD pipeline with security gates and quality checks
- Infrastructure as Code with Terraform modules
- Kubernetes deployment with Helm charts and ArgoCD GitOps
- Full monitoring, alerting, and incident response setup
- Cost optimization and automated scheduling
- Complete documentation and architecture diagrams

# Batch Schedule & Enrollment

Next Batch: **27th February 2026**

Country	Schedule	Timing
Australia	MON-FRI (12 Weeks)	6:30 PM - 8:30 PM AEST
US / Canada	MON-FRI (12 Weeks)	8:00 PM - 10:00 PM EST
Singapore	MON-FRI (12 Weeks)	7:00 PM - 9:00 PM SGT
Germany	MON-FRI (12 Weeks)	7:00 PM - 9:00 PM CET
India (Offline)	MON-FRI (12 Weeks)	10:00 AM - 1:00 PM IST

## Course Fee: Rs 80,000 (One-time Single Payment)

This is 100% real-time production-based training, not pre-recorded theory.

100% Placement Assurance | Lifetime Access to Recordings | Dedicated Mentor

## Enroll Now:

Phone / WhatsApp: **+91 7993 822600**

Address: 506, Manjeera Majestic Homes, Kukatpally Housing Board Colony, Hyderabad, Telangana 500072

Facebook: [facebook.com/profile.php?id=61588159723801](https://facebook.com/profile.php?id=61588159723801)

Instagram: [instagram.com/anumulasetty.1](https://instagram.com/anumulasetty.1)

YouTube: [youtube.com/channel/UCeEKRXyy3Zzn3QC5kVen84A](https://youtube.com/channel/UCeEKRXyy3Zzn3QC5kVen84A)