



# CloudBridge DevOps Consulting

## SRE — Site Reliability Engineering

Operate services at scale with Google-inspired SRE practices. SLOs, error budgets, incident management, chaos engineering, capacity planning — ensure your systems are resilient, observable, and reliable.

Duration	Mode	Fee	Placement
8 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:

Prometheus | Grafana | Loki | Tempo | OpenTelemetry | Jaeger | PagerDuty | Litmus Chaos | k6 | KEDA | Istio | ELK Stack | Alertmanager

### Contact Us

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

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

# Detailed Curriculum

## Module 1

### SRE Fundamentals & Principles

#### Topics

- SRE origins: Google's approach to operations
- SRE vs DevOps vs Platform Engineering
- Eliminating toil: Automation-first mindset
- Error budgets: Concept, calculation, policies
- Blameless postmortem culture
- Risk analysis and management for services
- SRE team structure and responsibilities
- Production readiness reviews (PRR)

#### Hands-on Practice

- Define error budget for sample service
- Conduct a blameless postmortem exercise
- Create production readiness checklist
- Identify and categorize toil in operations

## Module 2

### SLOs, SLIs & Service Level Management

#### Topics

- SLIs: Defining meaningful indicators (latency, availability, throughput)
- SLOs: Setting realistic reliability targets
- SLAs: Business commitments and consequences
- SLO-based alerting vs threshold alerting
- Error budget policies and escalation
- Multi-window, multi-burn-rate alerting
- SLO tracking dashboards and reporting
- SLO culture: Making reliability a first-class concern

#### Hands-on Practice

- Define SLIs and SLOs for a microservices app
- Implement SLO tracking with Prometheus
- Create SLO dashboards in Grafana
- Configure multi-burn-rate alerts
- Calculate and report error budget consumption

## Module 3

### Monitoring & Observability at Scale

#### Topics

- Three pillars: Metrics, Logs, Traces
- Prometheus: Advanced PromQL, federation, remote write
- Grafana: Advanced dashboarding, Loki, Tempo
- Distributed tracing: OpenTelemetry, Jaeger
- Centralized logging: ELK/EFK at scale
- Metrics cardinality management
- Monitoring as Code: Jsonnet, Grafonnet
- Synthetic monitoring and black-box probes

#### Hands-on Practice

- Deploy production-grade Prometheus stack
- Implement OpenTelemetry in an application
- Set up Grafana Loki for log aggregation
- Create Monitoring-as-Code dashboards
- Configure synthetic monitoring probes

# Detailed Curriculum (continued)

## Module 4

### Incident Management & On-Call

#### Topics

- Incident response lifecycle: Detect, respond, recover, learn
- Incident command system and roles
- On-call best practices: Rotation, escalation, handoff
- Alert routing: PagerDuty, Opsgenie, VictorOps
- Incident communication: Status pages, stakeholder updates
- War rooms and incident coordination
- Root cause analysis (RCA) techniques
- Blameless postmortems: Template and facilitation

#### Hands-on Practice

- Set up PagerDuty with on-call rotation
- Simulate an incident and run response drill
- Write a blameless postmortem report
- Configure escalation policies
- Create public status page for services

## Module 5

### Capacity Planning & Performance

#### Topics

- Capacity planning methodologies
- Load testing: k6, Locust, JMeter
- Performance profiling and bottleneck identification
- Autoscaling strategies: HPA, VPA, KEDA, Cluster Autoscaler
- Resource quota management in Kubernetes
- Traffic management and rate limiting
- Database scaling: Read replicas, sharding, caching
- CDN and edge optimization

#### Hands-on Practice

- Run load tests with k6 on production-like environment
- Identify and fix performance bottlenecks
- Configure KEDA-based autoscaling
- Implement rate limiting with Envoy/NGINX
- Optimize database queries and caching

## Module 6

### Chaos Engineering

#### Topics

- Chaos engineering principles and practices
- Chaos Monkey, Litmus Chaos, Chaos Mesh
- Designing chaos experiments: Hypothesis, blast radius
- Steady-state verification
- Network chaos: Latency injection, partition, packet loss
- Pod and node failure experiments
- Game days: Organizational chaos exercises
- Building confidence in system resilience

#### Hands-on Practice

- Install Litmus Chaos on Kubernetes
- Run pod-kill chaos experiments
- Inject network latency and observe behavior
- Conduct a game day with the team
- Verify auto-recovery and self-healing

# Detailed Curriculum (continued)

## Module 7

### Reliability Architecture & Design

#### Topics

- Designing for failure: Redundancy, failover, graceful degradation
- Circuit breaker pattern implementation
- Retry strategies with exponential backoff and jitter
- Multi-region and multi-cloud reliability
- Disaster recovery: RPO, RTO, backup strategies
- Blue-green and canary deployment for reliability
- Feature flags for safe rollouts
- Service mesh for reliability: Istio, Linkerd

#### Hands-on Practice

- Implement circuit breakers in application
- Configure multi-region failover
- Set up disaster recovery with automated backups
- Deploy canary releases with traffic splitting
- Implement feature flags with LaunchDarkly/Flagsmith

# 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)