DevOpsSchool

Course curriculum · November 2026

LEVEL 04 OF 04 · ADVANCED

Modelops Advanced Training

Govern an enterprise model portfolio with compliance controls, capacity planning, champion-challenger releases and proven ModelOps practices.

LIVE ONLINE **Max 8-10 hours**	CORPORATE (DAY-WISE) **5 days · Days 1-5**	SELF-PACED VIDEO **1-year LMS access**
BATCH SIZE **Max 10 learners**	NEXT BATCHES **1st of every month · weekends: first Saturday**	CERTIFICATE **Verifiable certificate of completion**

Foundation	Essential	Intermediate	Advanced
1 day · Included	2 days · Included	3 days · Included	5 days · This curriculum

INSIDE THIS CURRICULUM

What you will achieve	Outcomes and level focus
Who should attend	Audience and prerequisites
Agenda	45 topics · Foundation to Advanced
Hands-on labs	4 labs
Formats and fees	Live, 1:1, self-paced, corporate
Trainer and reviews	Rajesh Kumar
Enrolment	Batches, payment, contacts

WHY DEVOPSSCHOOL

- Rated 4.6 on Google
- 1,500+ verifiable certificates issued in the public registry
- Trainer Rajesh Kumar: 20 years in industry
- Small batches: max 10 learners, every session recorded

Course page: www.devopsschool.com/courses/modelops/modelops-advance-training.html
Talk to us: WhatsApp +91 99057 40781 · +1 (469) 756-6329 · contact@DevOpsSchool.com · reply within 1 hour

OUTCOMES

What you will achieve

By the end of the Modelops course path, you will be able to:

1

Operationalise models reliably

Take models from development to production with version control, CI/CD, containers and Kubernetes.

2

Monitor, scale and secure

Keep deployed models observable, scalable and protected with metrics, alerts and access control.

3

Govern the model portfolio

Apply compliance, risk management and audit practices across every model the organisation runs.

WHAT THE ADVANCED LEVEL ADDS

Governance, compliance, capacity and enterprise rollout

Hands-on: Governed model portfolio capstone. Run two models through validation, approval, champion-challenger release and audit reporting with monitoring and compliance evidence.

WHO SHOULD ATTEND

- Experienced Modelops practitioners responsible for quality, security and scale.
- Senior engineers, architects and leads who design and troubleshoot Modelops solutions.
- Teams making Modelops an organisation-wide standard.

BEFORE YOU START

- The Intermediate level, or equivalent hands-on experience.
- You can already: Monitor, scale and secure deployed models with metrics, logs, alerts, autoscaling and access control.
- Basic computer skills and a laptop with a stable internet connection for the live sessions and labs.
- This curriculum includes every earlier level, so it is complete on its own.

AGENDA · FOUNDATION TO ADVANCED

Modelops Advanced Training agenda

45 topics. Each level builds on the one before it, so this curriculum lists every earlier level in full. Days are for corporate (day-wise) delivery; live online batches cover the same agenda in max 8-10 hours.

DAY 1 — Foundation: ModelOps concepts, ML basics and version control

Included from Foundation

1. Introduction to ModelOps: what ModelOps is, why it is important and where it sits beside MLOps, DataOps and AIOps
2. Model development life cycle: business problem, data, build, validate, deploy, monitor and retire
3. Model types in scope: machine learning, rules, optimisation, statistical models and generative AI models
4. Introduction to machine learning: types of machine learning and common algorithms
5. Feature engineering: transforming raw data into model features and avoiding leakage
6. Model selection and evaluation: train, validation and test splits and choosing metrics
7. Introduction to DevOps: DevOps principles and practices applied to models
8. Git and version control: repositories, branches and pull requests for model code and configuration
9. Model inventory: recording owners, purpose, data sources, versions and status for every model
10. First working example: training a scikit-learn model and saving a versioned artifact with metadata

DAY 2 — Essential: CI/CD, containers and Kubernetes for models

Included from Essential

11. Continuous integration and continuous deployment (CI/CD): pipelines for model code, tests and artifacts
12. Model testing in CI: unit tests, data checks and minimum performance thresholds
13. Introduction to containers: why models ship in containers and image layering
14. Docker basics: Dockerfile, build, run, tag and push a model-serving image
15. Model serving: exposing predictions through a REST API with FastAPI or Flask
16. Introduction to container orchestration: scheduling, self-healing and service discovery
17. Kubernetes basics: Pods, Deployments, Services, ConfigMaps and Secrets for a model service
18. Model registry: MLflow registry versions, stages or aliases and promotion
19. Environment promotion: dev, test and production with approvals
20. Batch scoring: scheduled scoring jobs with Kubernetes CronJobs
21. Team workflow: code review, release notes and rollback for model changes

DAY 3 — Intermediate: Monitoring, alerting, scaling and security basics

Included from Intermediate

22. Introduction to monitoring and alerting: what to watch for models and their infrastructure
23. Metrics and monitoring tools: Prometheus metrics, Grafana dashboards and model-level KPIs
24. Log aggregation and analysis: prediction logs with the ELK stack or Grafana Loki
25. Alerting and notification: alert rules, routing with Alertmanager and on-call channels
26. Model performance monitoring: data drift, prediction drift and ground-truth feedback loops
27. Introduction to scaling and load balancing: request patterns and latency targets for inference
28. Load balancing techniques: Kubernetes Services, ingress controllers and round-robin versus least-connections
29. Autoscaling: Horizontal Pod Autoscaler and event-driven scaling with KEDA
30. Introduction to security and compliance: risks specific to models and their data

31. Access control and authentication: RBAC, service accounts, API keys and OAuth 2.0 for model endpoints
32. Threat modeling and risk assessment: data poisoning, model theft, prompt injection and abuse
33. Troubleshooting: failed rollouts, resource limits, cold starts and slow predictions

DAYS 4-5 **Advanced: Governance, compliance, capacity and enterprise rollout** **New at this level**

34. Capacity planning and management: forecasting inference load, GPU and CPU sizing and cost per prediction
35. Compliance frameworks: HIPAA, GDPR and similar regulations applied to model data and decisions
36. Model risk management: validation, independent review, approval workflows and periodic revalidation
37. Explainability and fairness: SHAP-based explanations, bias testing and documentation for regulators
38. Audit and lineage: tracing data, code, model versions and decisions for every prediction
39. Champion-challenger and canary releases: comparing models safely in production
40. Enterprise model portfolio: one inventory and lifecycle for ML, rules, optimisation and generative AI models
41. ModelOps platforms: Azure ML, SageMaker, Vertex AI and dedicated ModelOps tools compared
42. High availability: multi-zone serving, fallbacks and disaster recovery for critical models
43. Case studies: successful ModelOps implementations in finance, healthcare and retail
44. Best practices for implementing ModelOps: operating model, roles, metrics and roadmap
45. Q&A and wrap-up: capstone presentation of a governed, monitored model lifecycle

PRACTICE

Hands-on labs

You build these yourself during the course, guided by the trainer.

FOUNDATION **Version a first model**

Train a simple model, save the artifact with metadata, commit code and configuration to Git and register it in a model inventory.

ESSENTIAL **Containerised model on Kubernetes**

Build a CI/CD pipeline that tests a model, builds a Docker image and deploys the serving API to a Kubernetes cluster.

INTERMEDIATE **Observable, autoscaled model service**

Add Prometheus metrics, drift monitoring, log aggregation, alerts and autoscaling to the deployed model and secure its endpoint.

ADVANCED **Governed model portfolio capstone**

Run two models through validation, approval, champion-challenger release and audit reporting with monitoring and compliance evidence.

HOW YOU CAN LEARN

Formats and fees

The same agenda in four formats. Fees are in Indian rupees as of November 2026; the course page shows them in your currency.

FORMAT	DURATION	WHAT YOU GET	FEE
Live & interactive (online)	Max 8-10 hours	Instructor-led public batch of max 10 learners with demos, labs, Q&A and assignment review. Weekday batches start on the 1st of every month, weekend batches on the first Saturday of every month.	**INR 34,999**
1:1 live training (online)	Max 8-10 hours, one-to-one	The same agenda, taught one-to-one by the trainer. Starts immediately, without waiting for the next batch; sessions planned around your working hours, at your pace.	**INR 99,999**
Self-paced video	1-year LMS access	All four Modelops levels, plus 20+ more courses and 50+ tools, at your own pace.	**INR 833/month** billed yearly at INR 9,996
Corporate (day-wise)	5 days for this level	A private batch for your team, on demand. Foundation 1 day, Essential 2, Intermediate 3, Advanced 5 (cumulative).	**Quote on request**

ASSESSMENT AND CERTIFICATE

Your progress is checked through hands-on labs and assignments at every level. On completion you receive a DevOpsSchool certificate of completion with a unique credential ID that anyone can verify at devopsschool.com/certificates.

INCLUDED WITH EVERY LIVE BATCH

- Every live session is recorded and stays in your LMS for a year.
- Can't attend your batch? Move to next month's batch.
- Free demo class before you pay.
- Free 10-15 minute call with an advisor or the trainer to check the course fits you.

YOUR TRAINER

Learn from Rajesh Kumar

Principal Architect, trainer and mentor in DevOps, SRE, DevSecOps and platform engineering, with 20 years across 8+ software MNCs, including Staff DevOps/SRE Engineer for a leading Japanese mobile-payment platform and Principal DevOps Architect and Manager in Europe.

Profile: www.rajeshkumar.xyz · Videos: youtube.com/@TheDevOpsSchool

20 years in industry	**200+** corporate trainings
10,000+ engineers mentored	**70+** organisations coached

REVIEWS

What learners say

Rated 4.6 on Google · more reviews at devopsschool.com/testimonials and in our video testimonials.

> “Rajesh is very good trainer. Rajesh was able to resolve our queries and question effectively. We really liked the hands-on examples covered during this training program.”
>
> Indrayani, India

> “The training was very useful and interactive. Rajesh helped develop the confidence of all.”
>
> Abhinav Gupta, Pune

START YOUR MODELOPS TRAINING

Join the next batch

Weekday batches start on the 1st of every month and weekend batches on the first Saturday of every month, with max 10 learners each. 1:1 training can start immediately; corporate batches run on demand. We reply within 1 hour.

Pay by UPI, credit and debit cards, net banking or PayPal. Before you pay, read our refund policy. All levels of this course: www.devopsschool.com/courses/modelops/

ENROL OR RESERVE A SEAT
Modelops Advanced Training

WHATSAPP · INDIA
+91 99057 40781

WHATSAPP · USA
+1 (469) 756-6329

EMAIL
contact@DevOpsSchool.com