DevOpsSchool

Course curriculum · November 2026

LEVEL 04 OF 04 · ADVANCED

Opentofu Advanced Training

Design enterprise OpenTofu platforms with custom providers, encrypted state, secrets integration, security scanning and observability.

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	52 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/opentofu/opentofu-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 Opentofu course path, you will be able to:

1

Codify infrastructure with OpenTofu

Write clean, modular OpenTofu configurations that provision real cloud infrastructure.

2

Manage state and teams

Run remote, locked and encrypted state with collaborative multi-environment workflows.

3

Automate and secure IaC

Deliver infrastructure through tested, scanned CI/CD pipelines at enterprise scale.

WHAT THE ADVANCED LEVEL ADDS

Custom providers, encryption, secrets, scale and enterprise practice

Hands-on: Build an enterprise IaC platform. Encrypt state with a KMS key provider, pull secrets from Vault, scan code with Checkov in CI and deploy a multi-tier AWS app across three environments.

WHO SHOULD ATTEND

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

BEFORE YOU START

- The Intermediate level, or equivalent hands-on experience.
- You can already: Write reusable modules and providers, master state and backends, and deliver multi-environment infrastructure through CI/CD.
- 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

Opentofu Advanced Training agenda

52 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: IaC concepts, OpenTofu installation and core workflow

Included from Foundation

1. Introduction to OpenTofu: overview of OpenTofu and its ecosystem, open governance and the OpenTofu Registry
2. Comparison with Terraform: the licence change, the fork, compatibility and where the tools now differ
3. Key features and benefits: state encryption, provider-defined functions, early evaluation and OCI registry support
4. Infrastructure as code concepts: declarative versus imperative, idempotency, drift and immutable infrastructure
5. Installation and setup of OpenTofu: installer script, package managers, tofu version and editor extensions
6. Configuration files and structure: .tf and .tofu files, HCL blocks, arguments and expressions
7. Core workflow: tofu init, plan, apply and destroy explained step by step
8. Providers: required_providers, version constraints and the dependency lock file
9. Cloud authentication: AWS, Azure and Google Cloud credentials for OpenTofu
10. First configuration: provision a storage bucket or VM and read the plan and outputs
11. Formatting and validation: tofu fmt, tofu validate and reading plan symbols

DAY 2 — Essential: Core concepts, modules, state and remote backends

Included from Essential

12. OpenTofu core concepts: modules, providers and resources and how they relate
13. Managing infrastructure as code with OpenTofu: plan review, change sets and drift detection
14. Variables, outputs and state management: input types, defaults, tfvars files, outputs and state basics
15. Writing and organising configurations: file layout, locals, naming and best practices for OpenTofu coding
16. Setting up your first OpenTofu project: directory structure, provider setup and backend choice
17. Creating infrastructure with OpenTofu, an example project: network, compute and security rules
18. Resource provisioning with OpenTofu modules: registry modules, module inputs and outputs
19. Managing state and dependencies: implicit references, depends_on, tofu state list and show
20. Working with variables and remote backends: S3, Azure Blob and GCS backends and TF_VAR_ variables
21. Workspaces, functions and data sources: tofu workspace, built-in functions and data blocks
22. Troubleshooting common errors in OpenTofu workflows: auth failures, cycles, stale locks and TF_LOG
23. Versioning, collaboration and security for production: version pinning, Git workflow and sensitive values
24. OpenTofu community and resources: documentation, Slack, GitHub RFCs, with Q&A and wrap-up

DAY 3 — Intermediate: Reusable modules, state mastery, CI/CD and compliance

Included from Intermediate

25. Writing reusable modules: module structure, input validation, outputs and versioned module sources
26. Using and creating custom providers: provider aliases and building a provider with the plugin framework
27. Data sources and secrets: working with data sources and handling sensitive variables and outputs
28. In-depth state files: state structure, tofu state mv and rm, import blocks and moved blocks
29. Backends and locking: local versus remote state, S3 native locking, version control and state file best practices
30. Remote backends and collaboration: AWS S3 and HashiCorp Consul backends, workspaces and team workflows

31. Managing environments and multi-cloud setups: per-environment configuration and provider aliases
32. Building complex infrastructure: multi-tier and cloud-native provisioning across dev, staging and production
33. Functions and advanced workflows: provider-defined functions, count, for_each, dynamic blocks and conditionals
34. Managing dependencies between resources: lifecycle create_before_destroy, prevent_destroy and replace_triggered_by
35. OpenTofu for CI/CD automation: Jenkins and GitLab CI pipelines, plan artifacts, rollbacks and DR planning
36. Security, compliance and monitoring: auditing changes, compliance checks and alerts on resource changes
37. Testing configurations: tofu test with run blocks, assertions and mock providers
38. Wrap-up: final Q&A, community forums, additional resources and implementation questions

DAYS 4-5

Advanced: Custom providers, encryption, secrets, scale and enterprise practice

New at this level

39. Advanced features and evolution: recap of fundamentals, OpenTofu releases and complex use cases
40. Custom providers and modules: creating and managing providers and handling external APIs and dependencies
41. Packaging and sharing modules: private registries, OCI distribution and semantic versioning
42. Advanced state management: deep dive, locking, client-side state and plan encryption with key providers
43. Multi-cloud and hybrid-cloud backends: remote backends for collaborative work across clouds
44. Managing secrets and sensitive data: Vault and AWS Secrets Manager, environment-specific secrets, ephemeral values
45. Multi-environment setup: multiple workspaces, backends and configurations across dev, staging and production
46. Complex multi-tier architectures: scalable design, inter-service dependencies and a multi-tier web app on AWS
47. Complex workflows: advanced conditionals and loops, dynamic inputs and outputs, reusable configurations
48. Advanced dependency management: circular dependencies, dynamic provisioning, scaling and automated clean-up
49. CI/CD for infrastructure: CI/CD principles, Jenkins and GitLab integration, automated deploy and rollback
50. Advanced security practices: securing workflows, IAM best practices, Checkov and tfsec or Trivy, security audits
51. Monitoring and observability: logging, Prometheus and Grafana, alerts on infrastructure changes and debugging
52. Enterprise best practices: architectural patterns, real-world issues, Terraform migration and scaling for large teams

PRACTICE

Hands-on labs

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

FOUNDATION

Provision your first resource

Install OpenTofu, write a configuration for a cloud storage bucket, then plan, apply, change and destroy it.

ESSENTIAL

Build a modular network and compute stack

Create a VPC, subnets and a VM using registry and local modules, store state in a remote backend with locking and expose outputs.

INTERMEDIATE

Deliver multi-environment infrastructure via CI/CD

Package a reusable module with tests, deploy it to dev, staging and production from a GitLab CI pipeline and refactor state with moved blocks.

ADVANCED

Build an enterprise IaC platform

Encrypt state with a KMS key provider, pull secrets from Vault, scan code with Checkov in CI and deploy a multi-tier AWS app across three environments.

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 Opentofu 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 OPENTOFU 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/opentofu/

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