DevOpsSchool

Course curriculum · November 2026

LEVEL 04 OF 04 · ADVANCED

Devsec Testops Advanced Training

Run DevSecTestOps at scale with production-safe testing, chaos experiments, fuzzing, supply chain controls and audit-ready quality metrics.

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	48 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/devsectestops/devsec-testops-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 Devsec Testops course path, you will be able to:

1

Automate quality and security

Run unit, API, UI, performance and security tests automatically on every change with clear gates.

2

Shorten safe feedback loops

Keep pipelines fast and reliable with parallel runs, ephemeral environments and flaky-test control.

3

Prove release readiness

Use metrics, SBOMs, signed artifacts and pipeline evidence to show every release is tested and secure.

WHAT THE ADVANCED LEVEL ADDS

Shift-right, chaos, supply chain and governance

Hands-on: Capstone: release-ready DevSecTestOps pipeline. Build a governed pipeline for a microservice with functional, performance, fuzz and security gates, signed artifacts, a canary release and a chaos experiment.

WHO SHOULD ATTEND

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

BEFORE YOU START

- The Intermediate level, or equivalent hands-on experience.
- You can already: Add DAST, performance, container and contract testing to the pipeline and keep it reliable with on-demand environments and flaky-test 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

Devsec Testops Advanced Training agenda

48 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: Concepts, toolchain and first automated tests

Included from Foundation

1. DevSecTestOps explained: joining development, security, testing and operations, shift-left and shift-right practices
2. Delivery models: Waterfall, Agile and DevOps, and where testing and security activities sit in each
3. Continuous testing concepts: the test pyramid, unit, integration, API, UI and end-to-end tests, fast feedback loops
4. Security basics for testers: CIA triad, OWASP Top 10 overview, common vulnerabilities and attack vectors
5. CI/CD pipeline anatomy: source, build, test, security scan, package, deploy and monitor stages
6. Toolchain overview: Git, Jenkins or GitHub Actions, Maven or npm, JUnit or pytest, Playwright, SonarQube, OWASP ZAP, Docker
7. Version control for test code: Git basics, branching, pull requests, keeping tests next to application code
8. Lab environment setup: installing Git, a JDK or Python, Docker and Jenkins, running a starter web application locally
9. First unit tests: JUnit 5 or pytest structure, assertions, running tests from Maven or the command line
10. Quality and security gates: what a gate is, pass and fail criteria, coverage thresholds, severity thresholds
11. Defect and vulnerability lifecycle: logging, triage, severity vs priority, fix and verification
12. Roles and culture: shared ownership of quality and security, three amigos sessions, definition of done with security criteria

DAY 2 Essential: Functional automation, static checks and team pipeline

Included from Essential

13. UI test automation: Selenium WebDriver and Playwright, page object model, stable locators and explicit waits
14. API testing: REST Assured, Postman with Newman, status code, payload and JSON schema assertions
15. Test data management: fixtures, factories, synthetic data, masking production data for privacy
16. Behaviour-driven development: Gherkin feature files, Cucumber step definitions, linking scenarios to user stories
17. Code coverage: JaCoCo or coverage.py reports, line vs branch coverage, coverage checks on pull requests
18. Static analysis: SonarQube quality profiles and quality gates, code smells, bugs and security hotspots
19. Dependency scanning: OWASP Dependency-Check, npm audit or pip-audit, upgrading vulnerable libraries
20. Secrets detection: Gitleaks as a pre-commit hook and pipeline step, removing secrets from Git history
21. Jenkinsfile for tests: build, unit, API, UI and scan stages, publishing JUnit results
22. Containers for testing: Docker Compose test environments, Testcontainers for databases and message brokers
23. Test reporting: Allure reports, trend dashboards, tracking flaky tests
24. Pull request workflow: required checks, reviewing test changes, branch protection tied to passing gates

DAY 3 Intermediate: Dynamic security, performance and environment automation

Included from Intermediate

25. DAST automation: OWASP ZAP baseline and API scans in CI, authenticated scans, triaging alerts
26. Security test cases: abuse and misuse cases, authentication, authorization and session tests, OWASP ASVS as a checklist
27. Performance testing: JMeter, k6 or Gatling scripts, load, stress and soak tests, performance gates in CI

28. Container and IaC scanning: Trivy for images and Terraform, Hadolint for Dockerfiles, Checkov policies
29. Parallel execution: Selenium Grid, Playwright sharding, Jenkins parallel stages, test impact analysis
30. Service virtualisation and contracts: WireMock, mock servers, consumer-driven contract testing with Pact
31. On-demand test environments: ephemeral environments per pull request, Kubernetes namespaces, automatic teardown
32. Secrets for test pipelines: HashiCorp Vault or cloud secret managers, injecting credentials safely
33. Flaky test management: root causes, quarantine, retry policy, deterministic waits and test isolation
34. Findings management: DefectDojo for SAST, SCA and DAST results, CVSS and EPSS prioritisation
35. Troubleshooting pipelines: reading logs, reproducing failures locally, Playwright traces and videos for browser failures
36. Accessibility testing: axe-core and Lighthouse checks in CI against WCAG 2.2 criteria

DAYS 4-5 **Advanced: Shift-right, chaos, supply chain and governance** — New at this level

37. Shift-right testing: canary analysis, feature flags, synthetic monitoring, testing safely in production
38. Chaos engineering: hypotheses and steady state, fault injection with Chaos Mesh or LitmusChaos, game days
39. Security testing at scale: central scanning across many repositories, rule tuning, remediation SLAs per severity
40. Policy as code: OPA and Conftest or Kyverno policies enforcing test, scan and deployment rules
41. Software supply chain: CycloneDX SBOMs, cosign signing, SLSA provenance, verifying artifacts before release
42. Fuzz testing: coverage-guided fuzzing with libFuzzer, Jazzer or Atheris, API fuzzing, fuzzers in CI
43. Penetration testing integration: scoping, Burp Suite workflows, turning findings into automated regression tests
44. Quality and security metrics: escaped defects, time to remediate vulnerabilities, coverage trends, DORA metrics
45. Governance and compliance: audit evidence from pipelines, ISO 27001, SOC 2 and PCI DSS control mapping
46. Microservices test architecture: test strategy per service, contract vs end-to-end tests, pyramid trade-offs
47. Pipeline speed at scale: test selection, caching, build parallelism, keeping feedback under ten minutes
48. Capstone: end-to-end DevSecTestOps pipeline with functional, performance and security gates for a microservice

PRACTICE

Hands-on labs

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

FOUNDATION

First test-and-scan pipeline

Create a Jenkins pipeline that builds a small web application, runs its unit tests and a basic static code scan, and fails when either gate is not met.

ESSENTIAL

Team pipeline with functional and static gates

Extend the pipeline with Playwright UI tests, REST Assured API tests, SonarQube quality gate, Dependency-Check and Gitleaks, and publish an Allure report on every pull request.

INTERMEDIATE

Full-spectrum pipeline on ephemeral environments

Spin up a per-pull-request environment, run contract, performance (k6) and ZAP API scans against it, push findings to DefectDojo and tear it down automatically.

ADVANCED

Capstone: release-ready DevSecTestOps pipeline

Build a governed pipeline for a microservice with functional, performance, fuzz and security gates, signed artifacts, a canary release and a chaos experiment.

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 Devsec Testops 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 DEVSEC TESTOPS 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/devsectestops/

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