

DevOps foundations

Course outline · issued 14 September 2026

Technology areas	DevOps
Level	Intermediate
Short course	3 days
One-month track	4 weeks · 16 training days · 96 contact hours
Two-month track	8 weeks · 32 training days · 192 contact hours
Delivery	In person, Virtual, Hybrid
Class size	8 to 20 participants
Certification	Certificate of completion
Entry requirements	Some development or systems administration experience.

Who it is for

Developers and ICT operations staff.

By the end, participants can

- Use Git for collaborative development
- Set up a continuous integration pipeline
- Automate environment provisioning

Short course modules (3 days)

1. DevOps culture and flow
2. Git workflows
3. CI/CD pipelines
4. Containers and infrastructure as code
5. Pipeline build lab

One-month track — weeks 1 to 4

4 weeks · 16 training days · 96 contact hours

Week 1 — DevOps culture and flow

- Why handover between build and run fails
- Flow, feedback and continual learning
- Measuring delivery: lead time, failure rate, recovery
- What changes in a public-sector ICT unit

Practical: Map the current path from code change to production and time it.

Week 2 — Git and collaborative development

- Repositories, branches and merges
- Pull requests and code review
- Resolving conflicts without fear
- Branching strategies that suit small teams

Practical: Run a full change through branch, review and merge.

Week 3 — Continuous integration

- Build automation and artefacts
- Automated testing in the pipeline
- Static analysis and dependency scanning
- Keeping the build green

Practical: Build a CI pipeline that blocks a failing change.

Week 4 — Containers and infrastructure as code

- Containers, images and registries
- Composing a local environment
- Declarative infrastructure and state
- Environment parity and configuration

Practical: Containerise a sample service and provision its environment as code.

Checkpoint: the one-month track is assessed [here](#).

Two-month track — continues through weeks 5 to 8

8 weeks · 32 training days · 192 contact hours

Week 5 — Continuous delivery and deployment

- Deployment strategies and safe rollout
- Secrets and configuration management
- Database changes in a pipeline
- Rollback and forward fix

Practical: Automate deployment to a staging environment with rollback.

Week 6 — Observability and operations

- Logs, metrics and traces
- Alerting that does not cry wolf
- On-call, incident response and blameless review
- Runbooks and operational documentation

Practical: Instrument the service and prove an alert fires correctly.

Week 7 — Security in the pipeline

- Shifting security checks left
- Dependency and container vulnerability scanning
- Access control on pipelines and registries
- Audit evidence for a public institution

Practical: Add security gates to the pipeline and document the evidence trail.

Week 8 — Capstone pipeline

- Completing the end-to-end pipeline
- Peer review of another team's pipeline
- Presenting the delivery metrics achieved
- Adoption plan for the agency ICT unit

Practical: Demonstrate the capstone pipeline from commit to monitored deployment.

Capstone assessment and post-course evaluation.

Capstone

A working delivery pipeline for a sample agency service: version control, automated tests, containerised build, automated deployment and monitoring.

About this outline

Indicative extended tracks. The one-month track runs weeks 1 to 4; the two-month track continues through week 8 with deeper labs, certification preparation and a capstone. Weeks, contact hours and cohort sizes are finalised with each client.

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