

## DevOps Roadmap with Timeline (12 Months)

### Phase 1: Foundations (Months 1-2)

Focus: Understanding basics, setting up environment

#### Goals:

- Learn DevOps principles (CI/CD, IaC, automation, collaboration)
- Set up version control (Git/GitHub/GitLab)
- Get familiar with Linux CLI & scripting (Bash, Python)
- Basic understanding of containers (Docker)

#### Key Tools:

- Git, GitHub/GitLab
- Docker
- Bash/Shell scripting

#### Milestones:

- Git and GitHub workflows mastered
- Docker installed and basic images/containers created
- Linux basics and scripting proficiency

### Phase 2: Continuous Integration (Months 3-4)

Focus: Automating code builds and testing

#### Goals:

- Set up CI pipelines

- Run automated tests on each commit
- Integrate static code analysis

#### Key Tools:

- Jenkins, GitHub Actions, GitLab CI
- SonarQube, JUnit, Pytest

#### Milestones:

- CI pipelines set up for projects
- Automated unit tests integrated with CI

(Additional phases can be added similarly)