

1-Year Weekly Roadmap: DevOps + Cloud Engineer (Complete Skillset)

Month 1: Linux + Python Basics + Git/GitHub

Week 1: - Linux Basics: CLI, file system, permissions, navigation - [Linux Journey](#) - [The Linux Command Line Book](#) - Git Basics: init, clone, add, commit, push - [Git Handbook](#)

Week 2: - Bash Scripting: variables, loops, if-else, functions - [Bash Scripting Guide](#) - Python Basics: syntax, variables, loops, functions - [Automate the Boring Stuff](#)

Week 3: - Python File I/O, error handling, lists/dictionaries - Python + Linux: Create a file monitoring script - [FreeCodeCamp Python Full Course](#)

Week 4: - GitHub workflow: branches, pull requests - Final mini project: Python + bash script to backup files and push to GitHub

Month 2: AWS + Python SDK (boto3) + Networking

Week 5: - AWS Intro: IAM, EC2, S3, CLI - [AWS Cloud Practitioner Essentials](#) - Create and connect to EC2 instance

Week 6: - Python with AWS (boto3): upload file to S3, launch EC2 - [Boto3 Docs](#)

Week 7: - VPC basics, subnets, internet gateway, security groups - Python project: Auto EC2 + S3 setup using boto3

Week 8: - AWS: RDS, CloudWatch, SNS, EBS, Load Balancers - Project: Deploy Python app on EC2 + monitor with CloudWatch

Month 3: Docker + CI/CD (GitHub Actions + Jenkins)

Week 9: - Docker: images, containers, Dockerfile, docker-compose - [Docker Mastery by Bret Fisher](#)

Week 10: - Create Dockerfile for Flask app - Dockerize and run app locally

Week 11: - GitHub Actions: Setup pipeline to build/test app - [GitHub Actions Docs](#)

Week 12: - Jenkins: Install locally, create job - CI/CD Project: Auto deploy Docker app using GitHub Actions/Jenkins

Month 4: Infrastructure as Code (Terraform + Ansible)

Week 13: - Terraform: basics, syntax, init, plan, apply - [Terraform for Beginners – FreeCodeCamp](#)

Week 14: - Create Terraform config to launch EC2, create S3

Week 15: - Ansible basics: inventory, playbook, YAML, ad-hoc commands - [Ansible Docs](#)

Week 16: - Project: Provision EC2 with Terraform, configure with Ansible

Month 5: Monitoring + Logging (Prometheus, Grafana, ELK)

Week 17: - Prometheus + Node Exporter setup - Metrics and alerting basics

Week 18: - Grafana: dashboards, queries, alerts - [Grafana Labs Tutorials](#)

Week 19: - ELK Stack (Elasticsearch, Logstash, Kibana) - [ELK Guide](#)

Week 20: - Monitoring Project: Docker app monitored by Prometheus + Grafana

Month 6: Kubernetes (K8s) + Helm

Week 21: - K8s Basics: minikube, kubectl, pods, deployments - [KodeKloud Kubernetes for Beginners](#)

Week 22: - Services, ingress, configMaps, secrets

Week 23: - Helm basics: install charts, create custom chart

Week 24: - Project: Multi-tier app with K8s + Helm + Ingress + Auto-scaling

Month 7-8: Capstone Projects + Resume Building

Week 25-28: - Final Capstone Project: - Python Web App → Docker → Jenkins CI/CD → AWS Infra via Terraform → Kubernetes deployment → Monitored by Prometheus - Document architecture with diagrams (draw.io)

Week 29-30: - Write technical blog on project (Medium or Dev.to) - Prepare project README and GitHub clean-up

Month 9: Freelancing + Real World Simulation

Week 31-32: - Set up profiles on Upwork, Fiverr, Turing - Create 3 small service packages (e.g., "Deploy Docker app on AWS")

Week 33-34: - Apply for real client jobs - Simulate client work: respond to tickets, work with deadlines

Month 10: Job Hunting Prep + Profile Polish

Week 35-36: - Build ATS-friendly resume using project keywords - Update LinkedIn headline, banner, and About section

Week 37-38: - Mock Interviews: System Design (basic), Python scripts, AWS, CI/CD - [DevOps Interview Qs GitHub](#)

Month 11-12: Placement Phase

Week 39-44: - Apply to 5-10 jobs/day: Naukri, LinkedIn, AngelList, Hireact, CutShort - Attend interviews, refine answers

Week 45-48: - Accept first offer, keep upskilling - Aim for salary ₹50K/month+ (₹6 LPA+) - Keep learning advanced AWS (DevOps Pro cert or Kubernetes CKA later)

You're now a full DevOps + Cloud Engineer with a professional portfolio, projects, and certs.