**DevSecOps**

**Month 1: Foundations of DevSecOps and Security Fundamentals**

Week 1: Introduction to DevSecOps

* Definition and principles of DevSecOps
* Importance of integrating security into DevOps
* Cultural shifts and collaboration

Week 2-3: Security Fundamentals for DevOps

* Basics of security concepts and terminology
* Threat modeling and risk assessment
* Security controls and compliance

Week 4-5: Secure Coding Practices

* Secure coding principles and guidelines
* Common vulnerabilities and secure coding practices
* Static Application Security Testing (SAST) tools

Week 6: Security Testing in DevOps

* Overview of security testing types (SAST, DAST, IAST)
* Integrating security testing into CI/CD pipelines
* Automated security testing tools

**Month 2: Advanced DevSecOps Concepts and Implementation**

Week 1-2: Container Security

* Understanding container security challenges
* Securing Docker containers and Kubernetes clusters
* Implementing security policies for containerized environments

Week 3-4: Infrastructure as Code (IaC) Security

* Introduction to IaC security practices
* Scanning and securing IaC scripts
* Automated security checks in IaC pipelines

Week 5-6: Incident Response and Continuous Improvement

* Developing an incident response plan for DevSecOps
* Post-incident analysis and continuous improvement
* Integrating security into DevOps culture