DevOps Culture & CI/CD Pipelines

COURSE OVERVIEW

This course provides an exploration of the cultural principles, collaborative practices and technical workflows that bridges development and operations delivery. The curriculum covers modern tools and platforms such as Git, Jenkins, GitHub Actions, GitLab CI, Azure DevOps, and other pipeline technologies. Delegates will gain a strong foundation in the philosophy of DevOps, mastering the technical skills required to manage Continuous Integration and Continuous Delivery (CI/CD) pipelines. Through theory and practical studies, delegates will further understand how DevOps and CI/CD accelerate innovation, reduce risks, and ensure consistent high-quality application delivery in agile and cloud-native environments.

WHO SHOULD ATTEND?

This course is designed for software developers, DevOps engineers, system administrators, QA/test engineers, and IT professionals who aim to enhance their skills in modern software delivery practices. It is also suitable for anyone aspiring to enter the DevOps field. Whether participants are beginners with basic knowledge or professionals seeking to advance towards roles such as DevOps Engineer or Site Reliability Engineer (SRE).

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Explain core principles of DevOps and its impact on organizational culture and agility.
- Design and implement CI/CD pipelines to automate build, test, and deployment processes.
- Use version control systems (e.g., Git) for collaborative development and code management.
- Integrate testing frameworks into pipelines for automated quality assurance.
- Deploy applications using modern CI/CD tools such as Jenkins, GitHub Actions, or GitLab CI.
- Apply monitoring, logging, and feedback mechanisms to improve delivery pipelines.
- Demonstrate best practices for security, scalability, and resilience in DevOps workflows.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- Introduction to DevOps Culture and the CAMS (Culture, Automation, Measurement, Sharing) framework.
- Version Control, Deployment, IaC, Observability and Security.
- Version Control & Collaboration covering Git workflows, branching strategies, and collaborative coding.
- Principles, architecture, and stages of automated pipelines.
- Hands-on practical with Jenkins, GitHub Actions, GitLab CI, and Azure DevOps.
- Automated Testing and regression testing within CI/CD pipelines.
- Continuous Deployment Strategies including blue-green deployments, canary releases, and rollback mechanisms.
- Monitoring & Feedback Loops.
- Security in DevOps (DevSecOps), including shifting security left and embedding it into CI/CD workflows.

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.
1. A GTC end-of-course certificate
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded