Linux, AWS and DevOps Training Course Brochure

Course Content:

❖ **Module 1: Linux and System Administration**

✓ **Linux OS Introduction**
- Overview of Linux distributions
- Basic Linux architecture

✓ **Linux Commands**
- Command-line basics
- Navigating the file system
- File and directory manipulation

✓ **Server Administration**
- Setting up and configuring Linux servers
- User and group management
- File permissions and security

✓ **RPM and YUM Installation**
- Package management with RPM
- Using YUM for software installation and updates

❖ **Module 2: Cloud and AWS Services**

✓ **Cloud Computing Overview**
- Cloud computing models (IaaS, PaaS, SaaS)
- Advantages of cloud computing

✓ **AWS Services Overview**
- Introduction to Amazon Web Services (AWS)
- Key AWS services (EC2, S3, RDS, etc.)

❖ **Module 3: DevOps Fundamentals and CI/CD**

✓ **DevOps Fundamentals**
- Introduction to DevOps
- The need for DevOps
- Key principles of DevOps

- ✓ **DevOps in SDLC**
  - Integrating DevOps into the Software Development Life Cycle (SDLC)
  - Benefits of DevOps in SDLC
- ✓ **CI/CD Concepts**
  - CI/CD pipeline components
  - Automation and testing in CI/CD
- ✓ **Jenkins Basics**
  - Jenkins architecture
  - Setting up Jenkins
  - Running builds and tests
- ✓ **Build Job Scheduling**
  - Automating build job execution
  - Scheduling builds in Jenkins
- ✓ **Maven Integration**
  - Introduction to Maven
  - Using Maven for building Java projects
- ✓ **GIT Operations**
  - Version control with Git
  - Git branching and merging
  - Git best practices
- ✓ **GitHub Management**
  - Collaborative development with GitHub
  - Pull requests and code reviews
- ✓ **Module 4: Containerization and Orchestration**
- ✓ **Build Tool - Maven**
  - In-depth Maven usage
  - Maven plugins and dependencies
- ✓ **Ansible**
  - Introduction to Ansible
  - Infrastructure as Code (IaC) with Ansible
- ✓ **Docker**
  - Docker fundamentals
  - Creating and managing Docker containers
- ✓ **Kubernetes**
  - Introduction to Kubernetes
  - Container orchestration and scaling