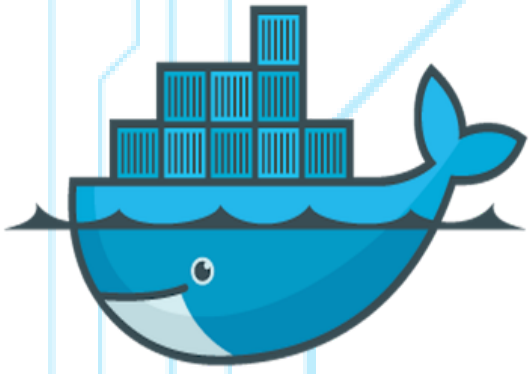
QUANTUM-AI
THE SCHOOL OF DATA AND AI

DOCKER AND KUBERNETES

INDUSTRY-ORIENTED | PROJECT-BASED | CAREER-FOCUSED

Welcome to DOCKER & KUBERNETES

The Docker and Kubernetes course is designed to help learners understand modern containerization and cloud-native application deployment. Students learn how to create, manage, and deploy applications using Docker containers, ensuring consistency across development and production environments. The course also covers Kubernetes for automating container deployment, scaling, and management. Through hands-on labs and real-world scenarios, learners gain practical experience in building containerized applications, managing clusters, and implementing DevOps practices. By the end of the course, participants can confidently deploy and manage scalable applications using Docker and Kubernetes in modern cloud infrastructure environments.



docker

QUANTUM-AI
THE SCHOOL OF DATA AND AI

WHY QUANTUMAI?

Quantum AI provides industry-focused training in Docker and Kubernetes, designed to help learners build modern cloud and DevOps skills. The program emphasizes practical learning, real-world deployment practices, and hands-on experience with containerized applications. Students learn how to package, deploy, scale, and manage applications efficiently across different environments. Our training focuses on modern infrastructure, automation, and cloud-native technologies used by leading companies. Through project-based learning and industry-relevant tools, Quantum AI prepares students to work confidently in DevOps, cloud engineering, and modern software deployment environments.

COURSE OVERVIEW

The Docker & Kubernetes course is designed to build practical skills in modern application deployment and cloud-native infrastructure. The program teaches how to package applications into containers using Docker and manage, scale, and automate deployments using Kubernetes.

Students learn container creation, image management, networking, and container orchestration along with cluster management and deployment strategies. Through hands-on labs and real-world scenarios, learners gain experience in building scalable, reliable, and portable applications. By the end of the course, participants are prepared for roles in DevOps, cloud computing, and modern software infrastructure management.



QUANTUM-AI
THE SCHOOL OF DATA AND AI

WHAT YOU WILL LEARN

Introduction to Containers

- Virtualization vs Containerization
- Introduction to Docker
- Container Architecture
- Installing Docker 1/4
- Basic Docker Commands

Docker Fundamentals

- Docker Images and Containers
- Creating Docker files
- Building and Managing Images
- Docker Networking
- Docker Volumes and Storage

Advanced Docker

- Docker Compose
- Multi-container Applications
- Container Security
- Docker Registry
- Managing Docker Environments

Introduction to Kubernetes

- Kubernetes Architecture
- Kubernetes Components
- Installing Kubernetes
- Cluster Setup and Configuration
- Kubernetes Command Line (kubectl)

Kubernetes Workloads

- Pods and Containers
- Deployments and Replica Sets
- Services and Networking
- ConfigMaps and Secrets
- Scaling Applications

Kubernetes Advanced Concepts

- Kubernetes Storage
- Load Balancing
- Monitoring and Logging
- Kubernetes Security
- Deploying Microservices Applications



QUANTUM-AI
THE SCHOOL OF DATA AND AI



BUILD SCALABLE APPLICATIONS

Learn Docker & Kubernetes with QuantumAI

Get In Touch

09870400650 info@quantumaico.com www.quantumaico.com

2nd Floor, Old dlf, C-I B, near Dr Lal Pathlabs, South City, Block C,
Old DLF Colony, Sector 14, Gurugram, Haryana 122001