



# Training Course: Administering a SQL Database

# 17 - 21 June 2024 Rome (Italy)

www.gh4t.com



# Training Course: Administering a SQL Database

Training Course code: IT235176 From: 17 - 21 June 2024 Venue: Rome (Italy) - Training Course Fees: 5775 D Euro

### Introduction

Welcome to the "Database Administration Training Program." Databases are at the heart of many modern applications and play a crucial role in managing and organizing data efficiently. This training program is designed to provide you with the fundamental knowledge and skills needed to administer a SQL database effectively. Whether you are an IT professional looking to enhance your skills or a beginner interested in database management, this program will help you build a strong foundation in database administration.

### **Objectives**

Upon completion of this 5-day training program, participants will:

- Understand the fundamentals of database management systems DBMS and the role of SQL databases in modern applications.
- Learn how to install, configure, and secure a database server.
- Gain knowledge of database design principles, normalization, and data modeling.
- Explore techniques for database backup, recovery, and maintenance.
- Discover best practices for database security, access control, and auditing.
- Learn performance tuning strategies and troubleshooting techniques.
- Understand high availability and disaster recovery options for databases.

### **Target Audience**

### This training program is designed for:

- IT Professionals: Database administrators, system administrators, and IT managers who want to enhance their skills in managing and maintaining SQL databases.
- Developers: Software developers and programmers who want to gain a deeper understanding of database administration to improve the performance and reliability of their applications.
- Beginners: Individuals who are new to database administration and want to start a career in this field or those who want to understand the basics of managing databases for personal or small business use.

### **Training Program Outline**

Day 1: Introduction to Database Administration

· Overview of Database Management Systems DBMS



- Types of SQL Databases e.g., MySQL, SQL Server, PostgreSQL
- Installation and Configuration of Database Server
- Database Security Basics

#### Day 2: Database Design and Modeling

- Entity-Relationship Diagrams ERDs
- Normalization and Data Integrity
- Creating Database Tables
- Indexing and Performance Optimization

#### Day 3: Backup and Recovery

- Importance of Database Backups
- Full, Differential, and Transaction Log Backups
- Backup Strategies and Best Practices
- Database Restore Procedures

#### Day 4: Security and Access Control

- User Management and Authentication
- Authorization, Roles, and Permissions
- Auditing and Monitoring
- Data Encryption and Security Best Practices

### Day 5: Performance Tuning and Maintenance

- Database Maintenance Tasks e.g., Reindexing, Statistics Update
- Query Optimization Techniques
- Monitoring and Troubleshooting
- High Availability and Disaster Recovery Options



## Registration form on the Training Course: Administering a SQL Database

Training Course code: IT235176 From: 17 - 21 June 2024 Venue: Rome (Italy) - Training Course Fees: 5775 Euro

Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

Delegate Information				
Person Responsible for Training and Development				
Payment Method				
eturn the ith cheque orizon t, Aldouki, vernorate,				