SQL Certification Prep Training Course

Professional Development Training Course Outline

Category	Business Intelligence	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Structured Query Language (SQL) is the backbone of modern data management, enabling organizations to efficiently store, retrieve, and manipulate critical business data. With the increasing reliance on data-driven decision-making, SQL has become an essential skill for professionals across industries. SQL Certification Prep Training Course equips participants with hands-on expertise in database design, query optimization, data manipulation, and advanced analytics, preparing them for real-world challenges and certification examinations. Through practical exercises, real-time projects, and case studies, learners gain both theoretical knowledge and practical skills necessary to excel in database management roles.

The course is designed for both beginners and professionals seeking certification, ensuring comprehensive coverage of SQL fundamentals, advanced functions, performance tuning, and security best practices. Participants will acquire proficiency in creating and managing relational databases, writing complex queries, implementing data integrity, and generating meaningful reports. By the end of the program, learners will possess the confidence to handle complex database scenarios, optimize queries for performance, and demonstrate expertise in SQL certification exams.

Programme Curriculum

SQL Certification Prep Training Course

Introduction

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Course Objectives

1. Master SQL query writing for data retrieval, filtering, and aggregation.
2. Develop skills in database design, normalization, and schema optimization.
3. Gain proficiency in advanced SQL functions and stored procedures.
4. Understand relational database concepts and entity-relationship modeling.
5. Optimize SQL queries for performance and efficiency.
6. Implement data integrity, constraints, and transaction management.
7. Perform data analysis using joins, subqueries, and set operations.
8. Handle real-world database challenges through practical case studies.
9. Learn security best practices and user access management in SQL.
10. Prepare effectively for SQL certification examinations.
11. Gain knowledge of backup, recovery, and database maintenance techniques.
12. Enhance reporting skills using SQL for business intelligence.
13. Develop problem-solving skills for complex database scenarios.

Organizational Benefits

- Improved data management efficiency and accuracy
- Enhanced decision-making through reliable data insights
- Streamlined reporting and analytics processes
- Increased team productivity with certified SQL professionals
- Reduced database errors and improved data integrity
- Optimized query performance for faster operations
- Effective handling of large datasets and complex queries
- Better risk management through secure database practices
- Support for data-driven strategic initiatives
- Elevated organizational credibility with certified staff

Target Audiences

- Database administrators
- Data analysts
- Business intelligence professionals
- Software developers
- IT support professionals
- Data engineers
- Students pursuing database certifications
- Professionals seeking career advancement in data management

Course Duration: 5 days

Course Modules

Module 1: Introduction to SQL

- Understanding relational database concepts
- Overview of SQL and its components
- Data types, tables, and primary keys
- Basic SELECT queries and filtering data
- Practical exercise on table creation and data insertion
- Case Study: Designing a student database schema

Module 2: Data Retrieval and Querying

- Advanced SELECT statements and filtering
- Using WHERE, ORDER BY, and LIMIT clauses
- Aggregation functions: SUM, AVG, COUNT, MIN, MAX
- Grouping data with GROUP BY and HAVING
- Combining data with joins (INNER, LEFT, RIGHT)
- Case Study: Sales data analysis for a retail company

Module 3: Database Design and Normalization

- Principles of database normalization
- Designing tables and relationships
- Primary and foreign keys implementation
- Indexing strategies for performance
- Handling many-to-many relationships
- Case Study: Normalizing an e-commerce database

Module 4: Advanced SQL Functions

- String, numeric, and date functions
- Conditional logic with CASE statements
- Subqueries and correlated subqueries
- Window functions and ranking
- Stored procedures and functions
- Case Study: Employee performance analysis

Module 5: Data Manipulation

- Inserting, updating, and deleting records
- Transactions and rollback techniques
- Using triggers and constraints
- Bulk data operations
- Maintaining data consistency
- Case Study: Financial transactions management

Module 6: Query Optimization

- Understanding query execution plans
- Index optimization and performance tuning
- Reducing query complexity

- Best practices for large datasets
- Optimizing joins and subqueries
- Case Study: Optimizing queries for a logistics database

Module 7: Security and Access Control

- User roles and privileges management
- Implementing database security best practices
- Encryption and secure connections
- Auditing and monitoring database activity
- Handling sensitive information securely
- Case Study: Secure HR database management

Module 8: Reporting and Certification Prep

- Generating reports with SQL queries
- Analytical queries for business intelligence
- Practice exams and sample questions
- Real-time project simulations
- Exam strategy and preparation tips
- Case Study: Sales and inventory reporting

Training Methodology

- Instructor-led sessions with real-time examples
- Hands-on exercises for each module
- Practical case studies to simulate real-world scenarios
- Group discussions and peer learning opportunities
- Access to SQL sandbox environments for practice
- Interactive assessments to reinforce concepts

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com