



**Course Name:** Oracle SQL Server Professional Certification Course

**Course Overview:**

This SQL course is structured to provide a comprehensive introduction to the world of databases, specifically focusing on relational databases and SQL (Structured Query Language). The curriculum spans from fundamental concepts of data and its significance in the digital age to advanced SQL techniques. It covers SQL syntax, commands, data types, and variables, as well as deeper concepts such as constraints, functions, and indexing. The course also includes practical modules on SQL commands, database management, and optimization, concluding with interview preparation and real-world projects to solidify the learner's command over SQL and enhance their problem-solving skills in database management.

**What You'll Learn?**

In this SQL course, learners will master relational database fundamentals, SQL syntax, and commands, including DDL, DML, and DQL operations. The course delves into implementing constraints, functions, and indexes to optimize database performance and integrity. Participants will also explore advanced topics such as joins, subqueries, and views, and prepare for real-world application through practical SQL projects and interview preparation, equipping them with robust SQL skills applicable in diverse data-driven roles.

**Internship Program:**

In addition to the course, you will participate in a 3-month internship involving six live projects. Upon successful completion, you will receive an Internship Certificate.

**Letter of Recommendation:**

Upon successfully completing the program and internship, you will also receive a Letter of Recommendation (LOR).

**Duration:**

30 Hours (5 Weeks) + 3 Months (Internship Program)

**Requirements:**

Oracle SQL

**Pre-requisite:**

No pre-requisite



## Curriculum

### Module 1. Introduction to Data

1. Understanding the concept of data
2. Importance of data in the digital age

### Module 2. What is a Relational Database?

1. Defining relational databases
2. Components and structure of relational databases

### Module 3. Introduction to SQL

1. Overview of SQL
2. Basic syntax and structure

### Module 4. History of SQL

1. Evolution and development of SQL
2. Significance in the world of databases

### Module 5. SQL Commands Categories

1. DDL (Data Definition Language)
2. DML (Data Manipulation Language)
3. DQL (Data Query Language)
4. DCL (Data Control Language)
5. TCL (Transaction Control Language)

### Module 6. Data Types and Variables

1. Understanding data types
2. Working with variables in SQL

### Module 7. Default Clause

1. Usage and implementation of the DEFAULT clause

### **Module 8. Constraints**

1. Types of constraints (Primary Key, Foreign Key, Unique, CHECK)
2. Applying constraints to ensure data integrity

### **Module 9. Alter & Rename**

1. Modifying existing database structures
2. Renaming database objects

### **Module 10. Sequence**

1. Introduction to sequences
2. Implementing sequences in SQL

### **Module 11. Relational, Logical, Set Operators in SQL**

1. Performing relational operations
2. Logical and set operations in SQL

### **Module 12. Order By**

1. Sorting query results using ORDER BY

### **Module 13. Single Row Functions**

1. Exploring and using single row functions

### **Module 14. Group/Aggregate Functions**

1. Aggregating data using GROUP BY
2. Roll up and other aggregate functions

### **Module 15. Joins & Types**

1. Understanding joins in SQL
2. Different types of joins (INNER, OUTER, CROSS)

### **Module 16. Subqueries**

1. Utilizing subqueries for complex queries
2. Nested and correlated subqueries



**Module 17. View & Inline Views**

1. Creating and managing views
2. Working with inline views

**Module 18. Index**

1. Importance of indexes
2. Creating and managing indexes in SQL

**Module 19. Data Dictionary**

1. Exploring the data dictionary in SQL

**Module 20. Tips & Tricks**

1. Practical tips for efficient SQL usage
2. Best practices and optimization techniques

**Module 21. Interview, Jobs & Freelance work in SQL**

1. Interview questions
2. Interview tips
3. How to crack job interview
4. How to register for freelancing work
5. How to get freelance work

**Module 22. SQL Professional Internship Program**

- 6 Live Professional Projects