# Oracle Database 12c/18c/19c SQL Fundamentals I

## **Course information**

Days : 3 Total lessons : 11 Suggested Prerequisites : • Familiarity with data processing concepts and techniques Training includes : • Experienced trainer(s) • Pre-test and Post-test • Practices and solutions Public price : • 10,000 baht(THB) : 1 person

In-house price :

- 30,000 baht(THB) : Economic Class : 1 5 people
- 46,000 baht(THB) : Small Class : 6 10 people
- 59,000 baht(THB) : Middle Class : 11 20 people
- 72,000 baht(THB) : Large Class : 21 30 people

All prices exclude VAT 7 %

## **Course details**

### Day 1

Introduction

Lesson 1 : Retrieving Data Using the SQL SELECT Statement

Lesson 2 : Restricting and Sorting Data

Lesson 3 : Using Single-Row Functions to Customize Output

Lesson 4 : Using Conversion Functions and Conditional Expressions

## Day 2

Lesson 5 : Reporting Aggregated Data Using the Group Functions

Lesson 6 : Displaying Data from Multiple Tables

Lesson 7 : Using Subqueries to Solve Queries

Lesson 8 : Using the Set Operators

## Day 3

Lesson 9 : Manipulating Data

Lesson 10 : Using DDL Statements to Create and Manage Tables

Lesson 11 : Creating Other Schema Objects

## Lesson details

#### Lesson 1 : Retrieving Data Using the SQL SELECT Statement

- List the capabilities of SQL SELECT statements
- Execute a basic SELECT statement

#### Lesson 2 : Restricting and Sorting Data

- Limit the rows that are retrieved by a query
- Sort the rows that are retrieved by a query
- Use ampersand substitution to restrict and sort output at run time

## Lesson 3 : Using Single-Row Functions to Customize Output

- Describe various types of functions available in SQL
- Use character, number, and date functions in SELECT statements

## Lesson 4 : Using Conversion Functions and Conditional Expressions

• Describe various types of conversion functions that are available in SQL



- Use the TO\_CHAR, TO\_NUMBER, and TO\_DATE conversion functions
- Apply conditional expressions in a SELECT statement

#### Lesson 5 : Reporting Aggregated Data

- Using the Group Functions
- Identify the available group functions
- Describe the use of group functions
- Group data by using the GROUP BY clause
- Include or exclude grouped rows by using the HAVING clause

#### Lesson 6 : Displaying Data from Multiple Tables

- Write SELECT statements to access data from more than one table using equijoins and nonequijoins
- Join a table to itself by using a self-join
- View data that generally does not meet a join condition by using outer joins
- Generate a Cartesian product of all rows from two or more tables

### Lesson 7 : Using Subqueries to Solve Queries

- Define subqueries
- Describe the types of problems that subqueries can solve
- List the types of subqueries
- Write single-row and multiple-row subqueries

### Lesson 8 : Using the Set Operators

- Describe set operators
- Use a set operator to combine multiple queries into a single query
- Control the order of rows returned

#### Lesson 9 : Manipulating Data

- Describe each data manipulation language (DML) statement
- Insert rows into a table
- Update rows in a table
- Delete rows from a table
- Control transactions

#### Lesson 10 : Using DDL Statements to Create and Manage Tables

- Categorize the main database objects
- Review the table structure
- List the data types that are available for columns
- Create a simple table
- Explain how constraints are created at the time of table creation
- Describe how schema objects work

#### Lesson 11 : Creating Other Schema Objects

- Create simple and complex views
- Retrieve data from views
- Create, maintain, and use sequences
- Create and maintain indexes
- Create private and public synonyms

For more information please contact : VT Technology Co.,Ltd. Tel +66 0 2594 5185 <u>contact@vttech.co.th</u> To see other available Oracle courses Please go to <u>www.vttech.co.th/course.html</u>

