

Szkolenie: Oracle
Oracle Database: SQL and PL/SQL Fundamentals

FORMA SZKOLENIA	MATERIAŁY SZKOLENIOWE	CENA	CZAS TRWANIA
Stacjonarne	Cyfrowe	7450 PLN NETTO*	5 dni
Stacjonarne	Tablet CTAB	8050 PLN NETTO*	5 dni
Metoda dlearning	Cyfrowe	7450 PLN NETTO*	5 dni
Metoda dlearning	Tablet CTAB	7450 PLN NETTO*	5 dni

* (+VAT zgodnie z obowiązującą stawką w dniu wystawienia faktury)

LOKALIZACJE

Kraków - ul. Tatarska 5, II piętro, godz. 9:00 - 16:00

Warszawa - ul. Bielska 17, godz. 9:00 - 16:00

DOSTĘPNE TERMINY

2019-09-02 | 5 dni | Warszawa

2019-10-14 | 5 dni | Kraków

Cel szkolenia:

This **Oracle Database: SQL and PL/SQL Fundamentals** training delivers the fundamentals of SQL and PL/SQL along with the benefits of the programming languages using Oracle Database technology. You'll explore the concepts of relational databases.

Learn To:

- Write queries against single and multiple tables, manipulate data in tables and create database objects.
- Use single row functions to customize output.
- Invoke conversion functions and conditional expressions.
- Use group functions to report aggregated data.
- Create PL/SQL blocks of application code that can be shared by multiple forms, reports and data management applications.
- Develop anonymous PL/SQL blocks, stored procedures and functions.
- Declare identifiers and trap exceptions.
- Use DML statements to manage data.
- Use DDL statements to manage database objects.

- Declare PL/SQL Variables.
- Conditionally control code flow (loops, control structures).
- Describe stored procedures and functions.
- Retrieve row and column data from tables.

Plan szkolenia:

- Introduction
 - Overview of Oracle Database 12c and related products
 - Overview of relational database management concepts and terminologies
 - Introduction to SQL and its development environments
 - The HR schema and the tables used in this course
 - Oracle Database documentation and additional resources
- Retrieve Data using the SQL SELECT Statement
 - List the capabilities of SQL SELECT statements
 - Generate a report of data from the output of a basic SELECT statement
 - Use arithmetic expressions and NULL values in the SELECT statement
 - Invoke Column aliases
 - Concatenation operator, literal character strings, alternative quote operator, and the DISTINCT keyword
 - Display the table structure using the DESCRIBE command
- Restricted and Sorted Data
 - Write queries with a WHERE clause to limit the output retrieved
 - Describe the comparison operators and logical operators
 - Describe the rules of precedence for comparison and logical operators
 - Usage of character string literals in the WHERE clause
 - Write queries with an ORDER BY clause
 - Sort the output in descending and ascending order
 - Substitution Variables
- Usage of Single-Row Functions to Customize Output
 - List the differences between single row and multiple row functions
 - Manipulate strings using character functions
 - Manipulate numbers with the ROUND, TRUNC, and MOD functions
 - Perform arithmetic with date data
 - Manipulate dates with the DATE functions
- Conversion Functions and Conditional Expressions
 - Describe implicit and explicit data type conversion

- Describe the TO_CHAR, TO_NUMBER, and TO_DATE conversion functions
- Nesting multiple functions
- Apply the NVL, NULLIF, and COALESCE functions to data
- Usage of conditional IF THEN ELSE logic in a SELECT statement
- Aggregated Data Using the Group Functions
 - Usage of the aggregation functions in SELECT statements to produce meaningful reports
 - Describe the AVG, SUM, MIN, and MAX function
 - How to handle Null Values in a group function?
 - Divide the data in groups by using the GROUP BY clause
 - Exclude groups of data by using the HAVING clause
- Display Data From Multiple Tables
 - Write SELECT statements to access data from more than one table
 - Join Tables Using SQL:1999 Syntax
 - View data that does not meet a join condition by using outer joins
 - Join a table to itself by using a self join
 - Create Cross Joins
- Usage of Subqueries to Solve Queries
 - Use a Subquery to Solve a Problem
 - Single-Row Subqueries
 - Group Functions in a Subquery
 - Multiple-Row Subqueries
 - Use the ANY and ALL Operator in Multiple-Row Subqueries
 - Use the EXISTS Operator
- SET Operators
 - Describe the SET operators
 - Use a SET operator to combine multiple queries into a single query
 - Describe the UNION, UNION ALL, INTERSECT, and MINUS Operators
 - Use the ORDER BY Clause in Set Operations
- Data Manipulation
 - Add New Rows to a Table
 - Change the Data in a Table
 - Use the DELETE and TRUNCATE Statements
 - How to save and discard changes with the COMMIT and ROLLBACK statements
 - Implement Read Consistency
 - Describe the FOR UPDATE Clause
- DDL Statements to Create and Manage Tables

- Categorize Database Objects
- Create Tables
- Describe the data types
- Understand Constraints
- Create a table using a subquery
- How to alter a table?
- How to drop a table?
- Other Schema Objects
 - Create, modify, and retrieve data from a view
 - Perform Data manipulation language (DML) operations on a view
 - How to drop a view?
 - Create, use, and modify a sequence
 - Create and drop indexes
 - Create and drop synonyms
- Introduction to PL/SQL
 - PL/SQL Overview
 - List the benefits of PL/SQL Subprograms
 - Overview of the Types of PL/SQL blocks
 - Create a Simple Anonymous Block
 - Generate the Output from a PL/SQL Block
- PL/SQL Identifiers
 - List the different Types of Identifiers in a PL/SQL subprogram
 - Usage of the Declarative Section to Define Identifiers
 - Use of variables to store data
 - Scalar Data Types
 - %TYPE Attribute
 - Bind Variables
 - Sequences in PL/SQL Expressions
- Write Executable Statements
 - Basic PL/SQL Block Syntax Guidelines
 - How to comment code?
 - SQL Functions in PL/SQL
 - Data Type Conversion
 - Nested Blocks
 - Operators in PL/SQL
- Interaction with the Oracle Server

- SELECT Statements in PL/SQL to Retrieve data
- Data Manipulation in the Server Using PL/SQL
- The SQL Cursor concept
- Learn to use SQL Cursor Attributes to Obtain Feedback on DML
- How to save and discard transactions?
- Control Structures
 - Conditional processing Using IF Statements
 - Conditional processing Using CASE Statements
 - Simple Loop Statement
 - While Loop Statement
 - For Loop Statement
 - The Continue Statement
- Usage of Composite Data Types
 - PL/SQL Records
 - The %ROWTYPE Attribute
 - Insert and Update with PL/SQL Records
 - Associative Arrays (INDEX BY Tables)
 - INDEX BY Table Methods
 - INDEX BY Table of Records
- Explicit Cursors
 - Understand Explicit Cursors
 - Declare the Cursor
 - How to open the Cursor?
 - Fetching data from the Cursor
 - How to close the Cursor?
 - Cursor FOR loop
 - Explicit Cursor Attributes
 - FOR UPDATE Clause and WHERE CURRENT Clause
- Exception Handling
 - What are Exceptions?
 - Handle Exceptions with PL/SQL
 - Trap Predefined Oracle Server Errors
 - Trap Non-Predefined Oracle Server Errors
 - Trap User-Defined Exceptions
 - Propagate Exceptions
 - RAISE_APPLICATION_ERROR Procedure

- Stored Procedures and Functions
 - What are Stored Procedures and Functions?
 - Differentiate between anonymous blocks and subprograms
 - Create a Simple Procedure
 - Create a Simple Procedure with IN parameter
 - Create a Simple Function
 - Execute a Simple Procedure
 - Execute a Simple Function

Wymagania:

Recommended Related Training Courses:

- Using Java - for PL/SQL and Database Developers
- Oracle Database: SQL Tuning for Developers

Poziom trudności



Certyfikaty:

Uczestnicy szkoleń otrzymają zaświadczenia o ukończeniu kursu sygnowane przez firmę Oracle.

Prowadzący:

Autoryzowany wykładowca Oracle.