

Szkolenie: Oracle
Oracle Database: Introduction to SQL/PLSQL Accelerated


FORMA SZKOLENIA	MATERIAŁY SZKOLENIOWE	CENA	CZAS TRWANIA
Stacjonarne	Cyfrowe	14750 PLN NETTO*	5 dni
Stacjonarne	Tablet CTAB	15350 PLN NETTO*	5 dni
Metoda dlearning	Cyfrowe	14750 PLN NETTO*	5 dni
Metoda dlearning	Tablet CTAB	14750 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

Cel szkolenia:

This **Introduction to SQL/PLSQL Accelerated** course will teach you SQL and PL/SQL programming language concepts. Learn how to write SQL commands, develop stored PL/SQL procedures, functions, packages and database triggers. This accelerated course covers 10 days worth of content in only 5 days.

Learn To:

- Understand the fundamental and core concepts of relational databases.
- Create reports of sorted and restricted data.
- Run data manipulation statements (DML).
- Retrieve row and column data from tables.
- Control privileges at the object and system level.
- Create indexes and constraints; alter existing schema objects.
- Create and query external tables.
- Create anonymous PL/SQL blocks, functions and procedures.
- Conditionally control code flow (loops, control structures).
- Create stored procedures, functions and packages.
- Conditionally control code flow (loops, control structures).
- Use PL/SQL packages to group and contain related constructs.
- Create triggers to solve business challenges.
- Leverage the Oracle supplied PL/SQL packages for various programming tasks.

Plan szkolenia:

- Introduction to Oracle Database
 - List the features of Oracle Database 12c
 - Discuss the basic design, theoretical, and physical aspects of a relational database
 - Categorize the different types of SQL statements
 - Describe the data set used by the course
 - Log on to the database using SQL Developer environment
 - Save queries to files and use script files in SQL Developer
- 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
 - Select All Columns
 - Select Specific Columns
 - Use Column Heading Defaults
 - Use Arithmetic Operators
 - Understand Operator Precedence
 - Learn the DESCRIBE command to display the table structure
- Learn to Restrict and Sort Data
 - Write queries that contain a WHERE clause to limit the output retrieved
 - List the comparison operators and logical operators that are used in a WHERE clause
 - Describe the rules of precedence for comparison and logical operators
 - Use character string literals in the WHERE clause
 - Write queries that contain an ORDER BY clause to sort the output of a SELECT statement
 - Sort output in descending and ascending order
- Usage of Single-Row Functions to Customize Output
 - Describe the differences between single row and multiple row functions
 - Manipulate strings with character function in the SELECT and WHERE clauses
 - Manipulate numbers with the ROUND, TRUNC, and MOD functions
 - Perform arithmetic with date data
 - Manipulate dates with the DATE functions
- Invoke Conversion Functions and Conditional Expressions
 - Describe implicit and explicit data type conversion
 - Use the TO_CHAR, TO_NUMBER, and TO_DATE conversion functions
 - Nest multiple functions
 - Apply the NVL, NULLIF, and COALESCE functions to data

- Use conditional IF THEN ELSE logic in a SELECT statement
- Aggregate Data Using the Group Functions
 - Use the aggregation functions to produce meaningful reports
 - Divide the retrieved data in groups by using the GROUP BY clause
 - Exclude groups of data by using the HAVING clause
- Display Data From Multiple Tables Using Joins
 - Write SELECT statements to access data from more than one table
 - View data that generally does not meet a join condition by using outer joins
 - Join a table to itself by using a self join
- Use Sub-queries to Solve Queries
 - Describe the types of problem that sub-queries can solve
 - Define sub-queries
 - List the types of sub-queries
 - Write single-row and multiple-row sub-queries
- The SET Operators
 - Describe the SET operators
 - Use a SET operator to combine multiple queries into a single query
 - Control the order of rows returned
- Data Manipulation Statements
 - Describe each DML statement
 - Insert rows into a table
 - Change rows in a table by the UPDATE statement
 - Delete rows from a table with the DELETE statement
 - Save and discard changes with the COMMIT and ROLLBACK statements
 - Explain read consistency
- Use of DDL Statements to Create and Manage Tables
 - Categorize the main database objects
 - Review the table structure
 - List the data types available for columns
 - Create a simple table
 - Decipher how constraints can be created at table creation
 - Describe how schema objects work
- Other Schema Object
 - Create a simple and complex view
 - Retrieve data from views
 - Create, maintain, and use sequences

- Create and maintain indexes
- Create private and public synonyms
- Introduction to PL/SQL
 - Overview of PL/SQL
 - Identify the benefits of PL/SQL Subprograms
 - Overview of the types of PL/SQL blocks
 - Create a Simple Anonymous Block
 - How to generate output from a PL/SQL Block?
- Declare PL/SQL Identifiers
 - List the different Types of Identifiers in a PL/SQL subprogram
 - Usage of the Declarative Section to Define Identifiers
 - Use variables to store data
 - Identify Scalar Data Types
 - The %TYPE Attribute
 - What are Bind Variables?
 - Sequences in PL/SQL Expressions
- Write Executable Statements
 - Describe Basic PL/SQL Block Syntax Guidelines
 - Learn to Comment the Code
 - Deployment of SQL Functions in PL/SQL
 - How to convert Data Types?
 - Describe Nested Blocks
 - Identify the Operators in PL/SQL
- Interaction with the Oracle Server
 - Invoke SELECT Statements in PL/SQL
 - Retrieve Data in PL/SQL
 - SQL Cursor concept
 - Avoid Errors by using Naming Conventions when using Retrieval and DML Statements
 - Data Manipulation in the Server using PL/SQL
 - Understand the SQL Cursor concept
 - Use SQL Cursor Attributes to Obtain Feedback on DML
 - Save and Discard Transactions
- Control Structures
 - Conditional processing using IF Statements
 - Conditional processing using CASE Statements
 - Describe simple Loop Statement

- Describe While Loop Statement
- Describe For Loop Statement
- Use the Continue Statement
- Composite Data Types
 - Use PL/SQL Records
 - The %ROWTYPE Attribute
 - Insert and Update with PL/SQL Records
 - INDEX BY Tables
 - Examine INDEX BY Table Methods
 - Use INDEX BY Table of Records
- Explicit Cursors
 - What are Explicit Cursors?
 - Declare the Cursor
 - Open the Cursor
 - Fetch data from the Cursor
 - Close the Cursor
 - Cursor FOR loop
 - The %NOTFOUND and %ROWCOUNT Attributes
 - Describe the FOR UPDATE Clause and WHERE CURRENT Clause
- Exception Handling
 - Understand 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
 - Create a Modularized and Layered Subprogram Design
 - Modularize Development With PL/SQL Blocks
 - Understand the PL/SQL Execution Environment
 - List the benefits of using PL/SQL Subprograms
 - List the differences between Anonymous Blocks and Subprograms
 - Create, Call, and Remove Stored Procedures
 - Implement Procedures Parameters and Parameters Modes
 - View Procedure Information

- Stored Functions and Debugging Subprograms
 - Create, Call, and Remove a Stored Function
 - Identify the advantages of using Stored Functions
 - Identify the steps to create a stored function
 - Invoke User-Defined Functions in SQL Statements
 - Restrictions when calling Functions
 - Control side effects when calling Functions
 - View Functions Information
 - How to debug Functions and Procedures?

Wymagania:

Recommended Related Training Courses:

- Using Java - for PL/SQL and Database Developers
- Oracle Database: SQL Tuning for Developers
- Oracle Database 12c: Analytic SQL for Data Warehousing

Poziom trudności



Certyfikaty:

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

Prowadzący:

Autoryzowany wykładowca Oracle.