
Introduction to Oracle

Course Length: 3 Days

Course Description

This course introduces students to the world of the Oracle® professional. You will learn what Oracle is, how companies use it, and the roles and responsibilities of the individuals that create and manage Oracle systems. You will also learn about the development life cycle, and the activities that take place during each phase. In addition, you will learn to create a basic data model, and how to implement that model as a fully functioning Oracle database. Finally, you will learn about the basics of database storage and the overall architecture of the Oracle Relational Database Management System (RDBMS).

Prerequisites: To ensure your success, we recommend you first take the following course or have equivalent knowledge:

- *Introduction to Programming*

Delivery Method: Instructor-led, group-paced, classroom-delivery learning model with structured, hands-on activities.

Performance-Based Objectives

- Describe basic Oracle concepts and how they relate to DBAs and developers.
- Describe the goals of normalization.
- Identify the techniques of logical database design, and apply these techniques to design a basic Entity-Relationship Diagram (ERD).
- Describe the use of SQL, and write SQL statements to create, retrieve, and manipulate data.
- Create and execute a simple PL/SQL program and describe the use and syntax of packages, procedures, functions, and triggers.
- List the objects that might be found in an Oracle database, and describe how they are stored.
- Explain the architecture of Oracle and the overall operation of the RDBMS.

Course Content

Lesson 1: Introduction to Database Concepts

- Topic 1A: Users of Oracle
- Topic 1B: The Relational Database Model
- Topic 1C: The Development Life Cycle

Lesson 2: Data Modeling and Database Design

- Topic 2A: Overview of Normalization
- Topic 2B: Data Modeling
- Topic 2C: Entities and Attributes
- Topic 2D: Entities and Their Relationships
- Topic 2E: Denormalization

Lesson 3: Introduction to Structured Query Language

- Topic 3A: Introduction to SQL*Plus
- Topic 3B: The SELECT Statement

Lesson 4: Other Structured Query Language Statements

- Topic 4A: Data Manipulation Language (DML)
- Topic 4B: Transaction Control Language (TCL)
- Topic 4C: Data Definition Language (DDL)
- Topic 4D: Data Control Language (DCL)

Lesson 5: Procedural Language/Structured Query Language

- Topic 5A: Overview of PL/SQL
- Topic 5B: Stored Packages, Procedures, and Functions
- Topic 5C: Triggers

Lesson 6: Database Objects

- Topic 6A: Data Blocks
- Topic 6B: Database Storage
- Topic 6C: Oracle and Object-oriented Methodology

Lesson 7: Oracle Architecture

- Topic 7A: The Oracle Database
- Topic 7B: The Oracle Instance
- Topic 7C: Executing SQL Statements
- Topic 7D: Other Oracle Products and Tools

Appendix A: Removing Oracle

- Removing Oracle Databases and SoftwareTopic