

Using Oracle Machine Learning with Autonomous Database 2024 ELS

Course Duration: 16 Hours

Course Code: ELS-OML-ADB-2024

1. Course Overview

The *Using Oracle Machine Learning with Autonomous Database 2024 ELS* course is designed to help learners understand how to leverage Oracle Machine Learning (OML) capabilities within the Oracle Autonomous Database. Participants will explore OML features, learn how to build, train, and deploy machine learning models, and gain hands-on experience using Oracle tools to solve real-world business challenges. This course focuses on automating data science workflows and using in-database algorithms for predictive analytics.

2. What You'll Learn?

By the end of this course, you will be able to:

- Understand the fundamentals of Oracle Machine Learning (OML).
- Explore the integration of OML with Oracle Autonomous Database.
- Create and manage machine learning models using SQL, Python, and AutoML.
- Perform data preparation, feature engineering, and model evaluation.
- Deploy and monitor ML models within the Autonomous Database environment.
- Apply OML for solving business use cases and predictive analytics.

3. Target Audience

This course is intended for:

- Data Scientists and Data Analysts
- Database Administrators (DBAs) interested in ML integration
- Developers working with Oracle Autonomous Database
- Business Intelligence (BI) Professionals
- Anyone looking to apply machine learning in an Oracle environment

4. Pre-Requisites

Before attending this course, participants should have:

- Basic knowledge of databases and SQL
- Familiarity with Python programming (preferred but not mandatory)
- Understanding of fundamental machine learning concepts

5. Course Content

Module 1: Introduction to Oracle Machine Learning (OML)

- Overview of Oracle Autonomous Database and OML
- Key features and benefits

Module 2: Working with OML in Autonomous Database

- User interface and environment setup
- Managing users and privileges

Module 3: Data Preparation and Exploration

- Data loading and transformation

- Feature engineering and data profiling

Module 4: Building and Training Models

- Using in-database algorithms
- AutoML functionality and workflows

Module 5: Model Evaluation and Deployment

- Performance metrics and validation
- Deploying and managing ML models in ADB

Module 6: Advanced OML Features

- OML with Python and R
- Integrating ML models with applications

Module 7: Real-World Use Cases and Best Practices

- Predictive analytics scenarios
- Industry use cases with Oracle Autonomous Database