

Oracle Cloud Infrastructure Data Science Professional(2023): Hands-on Workshop

Oracle Cloud Infrastructure

DURATION

3 Days

MODULES

6 Lectures

COURSE CODE

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Course Overview

You will learn to rapidly build, train, deploy, and manage machine learning models using OCI Data Science.

What You Will Learn

Module 1: Welcome to Data Science

- Course Overview

Module 2: Introduction and Configuration

- Data Science: Introduction
- ADS SDK Overview
- Tenancy Configuration Basics
- Configure a Tenancy with OCI Resource Manager
- Networking for Data Science
- Authenticate to OCI APIs

Module 3: Workspace Design and Setup

- Projects
- Notebook Sessions
- How to Work with JupyterLab
- Conda Environments: Overview
- Data Science Conda Environments
- Manage Conda Environments
- OCI Vault: Introduction
- Using OCI Vault in OCI Data Science
- Code Repositories (Git)

Module 4: Machine Learning Lifecycle

- ML Lifecycle: Overview
- Access Data
- Data Preprocessing
- Introduction to Feature Types
- Custom Feature Types
- Data Visualization
- Model Training
- Oracle AutoML: Introduction
- Hyperparameter Tuning: ADSTuner
- Model Evaluation
- Model Explanations: Global Explainer
- Model Explanations: Local and WhatIf
- Model Catalog: Overview
- Model Serialization
- Model Deployment

Module 5: MLOps Practices

- MLOps Architecture
- Oracle Cloud Infrastructure Data Science Jobs
- Create and Manage Jobs for Custom Tasks
- Jobs Monitoring and Logging

Module 6: Related OCI Services

- Spark Applications, Data Flow, and Data Science
- Oracle Open Data
- Oracle Cloud Infrastructure Data Labeling
- Oracle AI Perceptual Services
- Oracle AI Decision Services