

Module	Content/Topics	Learn to optimize models and workflows for performance	Pedagogy	Capstone/Case Study	Earlier Duration	Revised
1. Introduction to Oracle ERP & OCI	Overview of Oracle ERP, Key Modules, Introduction to OCI	Learn to optimize models and workflows for performance	Interactive lectures, live demos	Case Study: Overview of ERP System Implementation for a Retail Business	4 sessions (4 hours)	2
2. Setting Up the Environment	Creating an Oracle Cloud Account, Configuring OCI Data Science Instances	Learn to optimize models and workflows for performance	Hands-on lab, guided setup	Capstone: Setting up OCI Data Science environment for a finance dataset	4 sessions (4 hours)	2
3. Data Extraction from Oracle ERP	Identifying Data Sources, Extracting Data Using APIs, Using ODI	Learn to optimize models and workflows for performance	Hands-on ETL exercise, video tutorials	Capstone: Extracting Sales Data from Oracle ERP for Analysis	6 sessions (6 hours)	3
4. Data Preprocessing and Cleaning	Data Cleaning Techniques, Handling Missing Data, Data Transformation	Learn to optimize models and workflows for performance	Interactive sessions, data cleaning labs	Case Study: Data Cleaning for Accurate Inventory Analysis	5 sessions (5 hours)	2
5. Exploratory Data Analysis (EDA)	Visualizing Data with OCI Notebooks, Descriptive Statistics, Anomaly Detection	Learn to optimize models and workflows for performance	Data visualization exercises, guided tutorials	Capstone: Sales Trend Analysis Using Oracle Analytics Cloud	5 sessions (5 hours)	5
6. Feature Engineering and Data Transformation	Feature Selection, Time Series Feature Engineering	Learn to optimize models and workflows for performance	Practical labs, coding exercises	Case Study: Feature Engineering for Demand Forecasting	5 sessions (5 hours)	5
7. Model Building and Training	Overview of ML Algorithms, Building Predictive Models, Time Series Modeling	Learn to optimize models and workflows for performance	Hands-on labs, guided model-building sessions	Capstone: Predicting Financial Trends Using Oracle ERP Data	10 sessions (10 hours)	10
8. MLOps Workflow Design	MLOps Lifecycle, Designing Pipelines, CI/CD	Learn to optimize models and workflows for performance	Workshops, pipeline-building sessions	Capstone: Building an MLOps Pipeline for Sales Forecasting	6 sessions (6 hours)	6
9. Model Deployment on OCI	Deploying Models as REST APIs, Model Deployment on OKE	Learn to optimize models and workflows for performance	Hands-on deployment, live demonstration	Capstone: Deploying a Revenue Prediction Model as an API	5 sessions (5 hours)	5
10. Model Monitoring and Maintenance	Real-Time Monitoring, Drift Detection, Retraining Models	Learn to optimize models and workflows for performance	Interactive labs, dashboard creation	Case Study: Real-Time Monitoring of Demand Forecasting Model	4 sessions (4hours)	4
11. Security and Compliance	Securing Data in OCI, Managing Permissions, Compliance	Learn to optimize models and workflows for performance	Lectures, role-based access setup labs	Case Study: Implementing Security for Sensitive Financial Data	3 sessions (3 hours)	0
12. Comparing OCI vs. FAW Data Science Approaches	Overview of FAW and OCI Data Science Services	Learn to optimize models and workflows for performance	Interactive comparison sessions, guided discussion	Case Study: Choosing the Right Platform for an ML Project	3 sessions (3 hours)	1

13. Case Studies and Use Cases	Predictive Maintenance, Financial Forecasting	Learn to optimize models and workflows for performance	Group discussions, guided analysis	Capstone: Developing a Predictive Maintenance Model for Manufacturing	4 sessions (4 hours)	1
14. Best Practices and Optimization	Cost Optimization Strategies, Model Lifecycle Management	Learn to optimize models and workflows for performance	Workshops, optimization exercises	Case Study: Cost Optimization for Data Science Workflows	3 sessions (3hours)	1
15. Hands-On Labs and Exercises	Configuring OCI Data Science Lab, Data Extraction	Reinforce skills through hands-on practice	Practical labs, guided problem-solving	Capstone: End-to-End Data Science Project using Oracle ERP Data	5 sessions (5 hours)	1
16. Assessment and Certification Preparation	Sample Questions, Mock Projects	Prepare for Oracle ERP and Data Science certifications	Mock tests, Q&A sessions	Capstone Review: Feedback and Improvement	3 sessions (3 hours)	0
17. Conclusion and Next Steps	Summary of Key Learning Points, Advanced Topics	Recap and explore further learning resources	Discussion, networking suggestions	N/A	2 sessions (2 hours)	0
				Total	77	48