

Training Course on Oracle Database Administration workshop

Professional Development Training Course Outline

Category	Information Technology	Duration	5 Days
Base Fee	\$1,500 USD	Delivery Mode	Online / On-site Hybrid

Course Introduction

The "AI for Oracle Database Administration" workshop is a cutting-edge training program designed for database administrators, developers, and IT professionals seeking to enhance their skills by integrating Artificial Intelligence (AI) into Oracle Database management. Training Course on Oracle Database Administration workshop will empower participants with the necessary tools and techniques to leverage AI in optimizing database performance, automating routine tasks, enhancing data security, and improving decision-making processes. With the growing demand for intelligent solutions in database management, this training will equip professionals to stay ahead in the ever-evolving tech landscape.

In the fast-paced world of technology, Oracle Database continues to be a dominant force in the enterprise sector. By integrating AI with Oracle Database Administration, professionals can unlock new potential for efficiency and scalability. Through this workshop, participants will gain a deep understanding of how AI-driven tools and techniques can be applied to database administration, resulting in smarter, more responsive database management systems. The course will cover a range of topics, from predictive analytics and automated backups to intelligent query optimization and AI-based troubleshooting, providing a comprehensive learning experience.

Programme Curriculum

Training Course on Oracle Database Administration workshop

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Objectives

By the end of this workshop, participants will:

1. Understand the fundamentals of AI and its role in Oracle Database Administration.
2. Learn how to integrate AI with Oracle Database to enhance database performance.
3. Apply machine learning models to predict database performance and capacity needs.
4. Use AI-based algorithms to optimize SQL queries for improved efficiency.
5. Develop automated data backup and recovery systems using AI tools.
6. Implement AI-driven data security features to detect and mitigate threats.
7. Explore AI techniques for automating routine database maintenance tasks.
8. Leverage AI to troubleshoot and resolve database issues faster.
9. Gain proficiency in using AI-powered Oracle Cloud Database solutions.
10. Analyze real-time data trends with AI to drive decision-making processes.
11. Implement AI for predictive analytics in database administration.
12. Enhance database scalability and resource allocation using AI-driven insights.
13. Foster an understanding of the ethical and operational implications of using AI in database management.

Target Audience

This workshop is ideal for the following professionals:

1. Oracle Database Administrators
2. IT Managers and System Architects
3. Data Analysts and Data Scientists
4. Oracle Database Developers
5. Cloud Database Specialists
6. AI and Machine Learning Enthusiasts

7. IT Support Professionals
8. Database Security Experts

Course Duration:

- 5 days

Course Modules

Module 1: Introduction to AI in Database Management

- Understanding AI concepts and their application to Oracle Database.
- Key AI algorithms used in database optimization.
- Oracle Database architecture and AI integration.
- Benefits of using AI for database administration.
- AI's impact on the future of database management.

Module 2: Machine Learning Models for Database Performance

- Introduction to machine learning techniques.
- Predicting database performance with machine learning.
- Resource optimization through AI algorithms.
- Analyzing trends and patterns using AI.
- Practical exercises on AI-driven performance forecasting.

Module 3: Intelligent Query Optimization

- Basics of SQL query performance.
- Using AI for SQL query analysis and optimization.
- AI-driven query execution plans.
- Case studies on AI-enhanced query optimization.
- Hands-on lab: Optimizing queries with AI tools.

Module 4: Automating Database Maintenance with AI

- Identifying repetitive tasks for automation.
- Building AI-driven automation workflows for database tasks.
- Scheduling automatic data backups and recovery.
- Ensuring compliance with automated systems.
- Real-life examples of AI-driven automation in Oracle Databases.

Module 5: AI-Based Data Security in Oracle Databases

- Leveraging AI for database encryption and security.
- Identifying and mitigating security threats using AI.
- Real-time threat detection and anomaly detection.
- Case study on AI-enhanced security features.
- Best practices for maintaining a secure AI-driven database environment.

Module 6: AI for Data Backup and Recovery

- Automating backup processes with AI.
- Predictive analytics for anticipating data recovery needs.
- Ensuring data integrity and safety through AI.
- Creating automated disaster recovery plans.
- Hands-on lab: Setting up AI-driven backup solutions.

Module 7: Troubleshooting and Issue Resolution with AI

- AI tools for automated troubleshooting.
- AI-based root cause analysis of database issues.
- Enhancing database uptime with proactive problem-solving.
- Machine learning models for issue detection.
- Practical troubleshooting exercises with AI tools.

Module 8: Ethical Implications of AI in Database Administration

- Understanding the ethical considerations of AI in database management.
- Balancing AI automation and human oversight.
- Addressing AI biases in database decision-making.
- Ethical frameworks for AI implementation in IT environments.
- Group discussion on ethical challenges in AI-driven databases.

Training Methodology

- **Instructor-Led Sessions:** Engaging presentations to introduce core concepts, tools, and best practices in Oracle Database and AI integration.
- **Hands-on Labs:** Practical exercises where participants work directly with Oracle Database environments integrated with AI tools to apply learned concepts.
- **Real-Life Case Studies:** Analysis of actual industry challenges to help participants relate theory to real-world situations.
- **Group Discussions:** Collaborative sessions where participants can share insights, experiences, and problem-solving strategies.
- **Interactive Exercises and Challenges:** Activities designed to reinforce learning, test application of concepts, and encourage active participation.
- **Knowledge Checks:** Periodic quizzes and short assessments to track learning progress and ensure comprehension.
- **Final Assessments:** Evaluations to measure the depth of understanding and application of the material covered throughout the workshop.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call +254769199797

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

- a.** The participant must be conversant with English.
- b.** Upon completion of training the participant will be issued with an Authorized Training Certificate
- c.** Course duration is flexible and the contents can be modified to fit any number of days.
- d.** The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.
- e.** One-year post-training support Consultation and Coaching provided after the course.
- f.** Payment should be done at least a week before commencement of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

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Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com