Datastat Research
Building Capacity in Training and Research

DATASTAT TRAINING IN

OFFICIAL COURSE PROSPECTUS

Center for Advanced Research & Professional Development

Nairobi Training Center • Global Virtual Academy • Corporate On-Site

ENTERPRISE RESOURCE PLANNING (ERP)

Predictive Maintenance using ERP Data Training Course

Comprehensive Course Syllabus, Practical Modules & Upcoming Schedules

PROGRAM SPECIFICATIONS & HIGHLIGHTS

DURATION
5 Days Practical Hands-on

DELIVERY MODES
In-Person Class & Live Virtual

CERTIFICATION
Accredited Certificate of Completion

INTAKES / DATES
Multiple Cohort Schedules Included

PREPARED FOR:

Valued Participant

Email: training@datastatresearch.org | Issued: November 21, 2026

Academic & Professional Training Year: 2026

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Predictive Maintenance using ERP Data Training Course

Enterprise Resource Planning (ERP) • 5 Days Intensive • Accredited Certification

Course Overview

Predictive Maintenance using ERP Data Training Course integrates ERP-driven insights with advanced predictive analytics, IoT connectivity, and machine learning models, enabling maintenance professionals, operations managers, and data analysts to transform raw enterprise data into actionable maintenance strategies.

Upcoming Training Schedules

Confirmed cohort intakes and venues. Both physical in-person classroom and live virtual online seats are available.

TRAINING DATES	LOCATION / VENUE	FORMAT / DURATION	INVESTMENT (FEE)
29 Dec 2025 – 2 Jan 2026	Nairobi	Classroom / 5d	**$1,500 USD / KES 110,000**
29 Dec 2025 – 2 Jan 2026	Kigali	Classroom / 5d	**$3,000 USD / KES 90,000**
29 Dec 2025 – 2 Jan 2026	Dubai	Classroom / 5d	**$5,000 USD / KES 90,000**
29 Dec 2025 – 2 Jan 2026	Cape Town	Classroom / 5d	**$4,500 USD / KES 90,000**
29 Dec 2025 – 2 Jan 2026	Addis Ababa	Classroom / 5d	**$3,000 USD / KES 90,000**
29 Dec 2025 – 2 Jan 2026	Singapore	Classroom / 5d	**$5,000 USD / KES 90,000**
29 Dec 2025 – 2 Jan 2026	Istanbul	Classroom / 5d	**$5,000 USD / KES 90,000**
29 Dec 2025 – 2 Jan 2026	Bangkok	Classroom / 5d	**$5,000 USD / KES 90,000**
29 Dec 2025 – 2 Jan 2026	Accra	Classroom / 5d	**$4,000 USD / KES 90,000**
5 Jan 2026 – 9 Jan 2026	Nairobi	Classroom / 5d	**$1,500 USD / KES 110,000**
5 Jan 2026 – 9 Jan 2026	Kigali	Classroom / 5d	**$3,000 USD / KES 90,000**
5 Jan 2026 – 9 Jan 2026	Dubai	Classroom / 5d	**$5,000 USD / KES 90,000**

* Corporate discounts and customized cohort scheduling are available for teams of 3 or more participants.

Course Curriculum & Modules

Predictive Maintenance using ERP Data Training Course

Introduction

In today’s competitive industrial landscape, leveraging data for operational excellence is no longer optional it’s imperative. Predictive Maintenance using ERP Data empowers organizations to anticipate equipment failures, reduce unplanned downtime, and optimize asset utilization. Predictive Maintenance using ERP Data Training Course integrates ERP-driven insights with advanced predictive analytics, IoT connectivity, and machine learning models, enabling maintenance professionals, operations managers, and data analysts to transform raw enterprise data into actionable maintenance strategies. Participants will gain a deep understanding of real-time data extraction, trend analysis, and performance monitoring from ERP systems to drive operational efficiency, minimize costs, and enhance decision-making.

This course is designed for professionals seeking to embrace Industry 4.0 standards, smart manufacturing practices, and AI-driven maintenance strategies. Through hands-on sessions, case studies, and interactive workshops, participants will explore predictive algorithms, KPI tracking, and risk-based maintenance planning using ERP datasets. By the end of this program, learners will be equipped to implement proactive maintenance schedules, reduce downtime, and extend the lifecycle of critical assets, positioning their organization as a leader in data-driven maintenance optimization.

Course Duration

5 days

Course Objectives

- Understand the fundamentals of Predictive Maintenance and its impact on operational efficiency.
- Analyze ERP data for maintenance insights and actionable recommendations.
- Apply machine learning algorithms to forecast equipment failures.
- Integrate IoT sensors with ERP systems for real-time monitoring.
- Develop risk-based maintenance strategies to minimize downtime.
- Optimize asset lifecycle management using predictive analytics.
- Create KPIs and dashboards for maintenance performance monitoring.
- Implement condition-based maintenance models using ERP data.
- Utilize data visualization tools for trend analysis and decision-making.
- Reduce maintenance costs through data-driven planning.
- Identify critical assets and prioritize maintenance interventions.
- Conduct root cause analysis for recurrent equipment issues.
- Enhance organizational digital transformation initiatives with ERP-driven predictive insights.

Target Audience

- Maintenance Managers
- Operations Managers
- Production Engineers
- ERP Analysts
- Data Scientists in Manufacturing
- Reliability Engineers
- Plant Managers
- IT Professionals supporting ERP systems

Course Modules

Module 1: Introduction to Predictive Maintenance

- Definition and benefits of predictive maintenance
- Maintenance strategies
- Industry 4.0 and smart manufacturing context
- ERP data relevance in predictive maintenance
- Case Study: Downtime reduction in a chemical plant

Module 2: Understanding ERP Data for Maintenance

- Key ERP modules
- Data extraction and integration techniques
- Maintenance work order analysis
- Historical maintenance data cleaning
- Case Study: Leveraging SAP PM data for predictive insights

Module 3: Predictive Analytics and Machine Learning Basics

- Overview of machine learning algorithms
- Regression, classification, and anomaly detection
- Time-series forecasting for equipment failure
- Feature selection and data preprocessing
- Case Study: Predicting motor failures in a manufacturing unit

Module 4: IoT Integration with ERP Systems

- Sensors and IoT device connectivity
- Real-time monitoring of asset health
- Data streaming into ERP systems
- Alerts and predictive triggers
- Case Study: IoT-enabled predictive maintenance in a power plant

Module 5: Condition-Based and Risk-Based Maintenance

- Difference between condition-based and risk-based approaches
- Identifying critical assets and failure modes
- Risk prioritization matrices
- Maintenance scheduling optimization
- Case Study: Risk-based maintenance planning in automotive manufacturing

Module 6: KPI Development and Dashboarding

- Key maintenance KPIs
- ERP dashboard configuration
- Real-time monitoring of predictive alerts
- Data visualization for actionable insights
- Case Study: KPI-driven decision-making at a steel plant

Module 7: Root Cause Analysis and Continuous Improvement

- Identifying recurring failures
- 5 Whys, Fishbone Diagram
- Linking root causes with ERP maintenance data
- Continuous improvement loops
- Case Study: Reducing repetitive downtime in a food processing plant

Module 8: Implementation Strategy and Digital Transformation

- Roadmap for predictive maintenance adoption
- Change management and stakeholder alignment
- ERP customization for predictive analytics
- ROI measurement and benefits tracking
- Case Study: Digital transformation in predictive maintenance at a pharmaceutical company

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@datastatresearch.org or call +254724527104

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 commence of the training, to DATASTAT CONSULTANCY LTD account, as indicated in the invoice so as to enable us prepare better for you

Certification & Learning Methodology

- Hands-on practical delivery with real-world datasets, case studies, and lab exercises.
- Post-training mentorship, access to class resources, and customized follow-up support.
- Participants who successfully complete the course receive an accredited Datastat Certificate of Completion.

How to Enroll & Reserve Your Seat

1. Online Registration: Visit https://datastatresearch.org/courses/predictive-maintenance-using-erp-data-training-course to register online.
2. Email Booking: Send participant details to training@datastatresearch.org for official invoice & reservation.
3. Support & Assistance: Inquire via phone +254 724 527 104 | +254 734 969 612.