Predictive Analytics for ERP Training Course

Professional Development Training Course Outline

Category	Enterprise Resource Planning (ERP)	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

is no longer optional it’s a strategic imperative. Predictive Analytics for ERP Training Course empowers professionals to leverage advanced predictive modeling, machine learning, and data-driven decision-making within ERP environments, driving efficiency, reducing operational risks, and optimizing business performance. Participants will gain hands-on experience in translating raw ERP data into actionable insights, enabling forecasting, trend analysis, and predictive decision support across finance, supply chain, HR, and production domains.

By the end of this program, learners will understand how to harness AI-powered analytics, real-time data monitoring, and business intelligence dashboards to uncover patterns, predict anomalies, and deliver measurable business outcomes. The course combines practical case studies, industry-relevant simulations, and ERP analytics best practices, ensuring that participants can immediately apply predictive insights to real-world business scenarios.

Programme Curriculum

Predictive Analytics for ERP Training Course

Introduction

In today’s data-driven business landscape, integrating predictive analytics with ERP systems is no longer optional it’s a strategic imperative. Predictive Analytics for ERP Training Course empowers professionals to leverage advanced predictive modeling, machine learning, and data-driven decision-making within ERP environments, driving efficiency, reducing operational risks, and optimizing business performance. Participants will gain hands-on experience in translating raw ERP data into actionable insights, enabling forecasting, trend analysis, and predictive decision support across finance, supply chain, HR, and production domains.

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Course Duration

5 days

Course Objectives

1. Master predictive analytics concepts and their applications in ERP systems.
2. Understand ERP data architecture for effective analytics.
3. Apply machine learning algorithms to forecast business trends.
4. Develop demand forecasting models for inventory optimization.
5. Implement financial predictive models to improve cash flow management.
6. Analyze supply chain and procurement data for risk mitigation.
7. Design HR analytics models for workforce planning and attrition prediction.
8. Utilize real-time ERP dashboards for actionable insights.
9. Integrate AI-driven predictive solutions with ERP platforms.
10. Perform anomaly detection to identify operational inefficiencies.
11. Translate predictive analytics outputs into strategic business decisions.
12. Build scenario analysis models to optimize operational planning.
13. Explore industry-specific case studies to implement best practices.

Target Audience

1. ERP Managers and Consultants
2. Business Analysts
3. Data Scientists and Data Analysts
4. Finance and Accounting Professionals
5. Supply Chain and Operations Managers
6. HR Managers and Workforce Analysts
7. IT Managers and ERP Administrators
8. Decision-makers seeking **data-driven strategic insights**

Course Modules

Module 1: Introduction to Predictive Analytics for ERP

- Overview of predictive analytics in ERP systems
- Key terminology and techniques
- Role of analytics in business decision-making
- Data sources and ERP data integration
- Case Study: Predictive maintenance in manufacturing

Module 2: ERP Data Architecture and Preprocessing

- Understanding ERP database structures
- Data extraction and transformation
- Handling missing and inconsistent data

- Data cleaning techniques for predictive modeling
- Case Study: Sales data preprocessing for forecasting

Module 3: Machine Learning for ERP

- Supervised vs. unsupervised learning
- Regression, classification, and clustering models
- Model selection and validation
- Implementing ML in ERP scenarios
- Case Study: Customer churn prediction in retail

Module 4: Forecasting and Demand Planning

- Time series forecasting techniques
- Seasonal trend analysis
- Inventory optimization using predictive analytics
- Forecast accuracy metrics
- Case Study: Demand planning in FMCG industry

Module 5: Financial Predictive Analytics

- Cash flow forecasting
- Risk assessment and fraud detection
- Budget optimization using predictive models
- Scenario analysis and decision support
- Case Study: Predictive financial modeling in banking

Module 6: Supply Chain & Operations Analytics

- Procurement forecasting
- Supplier risk and performance analysis
- Inventory replenishment models
- Predictive maintenance in operations
- Case Study: Logistics optimization in e-commerce

Module 7: HR and Workforce Predictive Analytics

- Employee attrition prediction
- Workforce planning and scheduling
- Performance analytics using ERP data
- Talent acquisition analytics
- Case Study: HR predictive modeling in IT sector

Module 8: ERP Predictive Analytics Implementation & Best Practices

- Dashboard creation and visualization
- KPI monitoring and reporting
- Integration with ERP systems
- AI-driven predictive tools in ERP
- Case Study: End-to-end predictive analytics implementation in manufacturing

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@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 commence 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

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

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

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