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)

# IoT Integration with ERP for Smart Manufacturing 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**

**DATASTAT TRAINING INSTITUTE**

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# IoT Integration with ERP for Smart Manufacturing Training Course

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

## Course Overview

IoT Integration with ERP for Smart Manufacturing Training Course is designed to equip professionals with the knowledge and practical skills to harness the full potential of connected technologies

## 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

**IoT Integration with ERP for Smart Manufacturing Training Course**

**Introduction**

**The Industrial Internet of Things (IIoT) is revolutionizing smart manufacturing by seamlessly integrating connected devices, sensors, and machinery with Enterprise Resource Planning (ERP) systems. This integration empowers manufacturers to achieve real-time visibility, optimize production workflows, enhance predictive maintenance, and make data-driven decisions that improve operational efficiency. The convergence of IoT and ERP fosters digital transformation, enabling companies to scale, automate processes, and maintain competitive advantage in an increasingly connected industrial landscape.**

**IoT Integration with ERP for Smart Manufacturing Training Course is designed to equip professionals with the knowledge and practical skills to harness the full potential of connected technologies. Participants will explore IoT-driven analytics, cloud-enabled ERP solutions, and cyber-physical systems to create intelligent manufacturing ecosystems. Through hands-on case studies, interactive simulations, and expert-led sessions, attendees will learn to implement IoT strategies that streamline operations, reduce costs, and maximize productivity, preparing them for the next wave of Industry 4.0 innovation.**

**Course Duration**

**5 days**

### Course Objectives

- Understand the fundamentals of IoT and ERP integration in smart manufacturing.
- Explore Industry 4.0 trends and their impact on digital manufacturing ecosystems.

- Analyze real-time data analytics for improved decision-making and efficiency.
- Implement predictive maintenance strategies using IoT-enabled devices.
- Optimize supply chain management with connected ERP systems.
- Develop skills to integrate cloud-based ERP solutions with IoT platforms.
- Examine cybersecurity protocols for safe IoT-ERP integration.
- Design digital twin simulations for production optimization.
- Apply AI and machine learning techniques to IoT data for smart manufacturing.
- Create KPIs and performance dashboards for IoT-enabled ERP systems.
- Evaluate energy management and sustainability through IoT integration.
- Study real-world case studies of successful IoT-ERP implementations.
- Build practical expertise in troubleshooting and scaling IoT-integrated ERP systems.

Target Audience

- Manufacturing Engineers
- Production Managers
- ERP Consultants
- IoT Solutions Architects
- Data Analysts in Manufacturing
- Operations Managers
- IT Managers in Industrial Sectors
- Industry 4.0 Enthusiasts

Course Modules

### Module 1: Introduction to IoT and ERP in Smart Manufacturing

- Fundamentals of IoT and ERP systems
- Benefits of IoT-ERP integration
- Industry 4.0 overview
- Key IoT devices and sensors in manufacturing
- Case Study: Siemens Smart Factory IoT integration

### Module 2: IoT Architecture and Connectivity

- IoT communication protocols
- Sensor and device data acquisition
- Edge vs. cloud computing
- Network and connectivity challenges
- Case Study: Bosch IoT Cloud implementation

### Module 3: ERP Systems for Manufacturing

- Overview of ERP modules
- ERP deployment strategies
- Integrating ERP with shop floor operations
- ERP reporting and analytics
- Case Study: SAP S/4HANA IoT integration

### Module 4: Data Analytics and Real-time Insights

- Real-time data collection and monitoring
- Predictive analytics for maintenance
- Data visualization dashboards
- Key KPIs for smart manufacturing
- Case Study: GE Predix platform for manufacturing

### Module 5: Predictive Maintenance and AI

- IoT-driven predictive maintenance strategies
- Machine learning models for fault detection

- Reducing downtime and increasing uptime
- Integrating AI with ERP systems
- Case Study: Caterpillar predictive maintenance use case

### Module 6: Supply Chain Optimization

- IoT-enabled inventory management
- Real-time tracking of goods
- Vendor and logistics integration
- ERP-driven procurement optimization
- Case Study: DHL IoT supply chain solutions

### Module 7: Cybersecurity and Risk Management

- IoT security protocols and encryption
- Securing ERP systems
- Risk assessment methodologies
- Compliance with industry standards
- Case Study: Honeywell secure industrial IoT deployment

### Module 8: Implementation and Best Practices

- Planning IoT-ERP integration projects
- Change management and workforce readiness
- Performance measurement and optimization
- Scaling IoT solutions in manufacturing
- Case Study: Schneider Electric smart manufacturing success

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/iot-integration-with-erp-for-smart-manufacturing-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.