Artificial Intelligence (AI) in Procurement and Supply Chain Management Training Course

Professional Development Training Course Outline

Category	Artificial Intelligence And Block Chain	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Artificial Intelligence (AI) in Procurement and Supply Chain Management Training Course is designed to empower professionals with the knowledge and practical skills to navigate the **digital transformation** of their industries. As **AI technologies** like **machine learning**, **predictive analytics**, and **Robotic Process Automation (RPA)** become integral to business operations, a profound shift is occurring in how goods and services are sourced, managed, and delivered. This program moves beyond theoretical concepts to provide a strategic and business-focused roadmap for leveraging AI to drive **operational efficiency**, enhance **strategic decision-making**, and build **resilient supply chains**.

Participants will gain a comprehensive understanding of how to implement **AI-powered solutions** to address real-world challenges, from **demand forecasting** and **supplier risk management** to **contract lifecycle management** and **procurement optimization**. Through a combination of expert-led instruction, interactive case studies, and hands-on exercises, this course will equip you to identify, evaluate, and deploy AI applications that create tangible business value. It is a critical step for anyone looking to stay competitive and lead their organization into the future of intelligent operations.

Programme Curriculum

Artificial Intelligence (AI) in Procurement and Supply Chain Management Training Course

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Course Duration

5 days

Course Objectives

- Understand the **strategic role of AI** in modern procurement and supply chain management.
- Master **AI-driven demand forecasting** and inventory optimization.
- Implement **predictive analytics** for proactive **supplier risk mitigation**.
- Leverage **machine learning** for intelligent **spend analysis** and cost reduction.
- Utilize **Natural Language Processing (NLP)** for automated **contract review** and compliance.
- Apply **Robotic Process Automation (RPA)** to streamline repetitive procurement tasks.
- Develop a **data-driven decision-making** framework for sourcing and logistics.
- Create a roadmap for **digital procurement transformation**.
- Explore **generative AI** applications in supply chain planning and scenario simulation.
- Assess the **ethical considerations** and **governance** of AI in procurement.
- Enhance **supply chain visibility** and resilience through AI-powered platforms.
- Drive **sustainability** and **ESG** initiatives with intelligent data insights.
- Learn to build a business case and measure the **ROI of AI** projects.

Organizational Benefits

- Automate routine tasks and accelerate key processes, leading to significant time and cost savings.
- Utilize data-driven insights for more accurate forecasting, better supplier selection, and smarter investment choices.
- Proactively identify and mitigate supply chain risks, strengthening the organization against disruptions.
- Stay ahead of the curve by leveraging cutting-edge technology to innovate and optimize operations.
- Uncover hidden savings opportunities through advanced spend analysis and optimized procurement strategies.
- Empower employees to focus on strategic, value-added tasks, improving job satisfaction and productivity.
- Ensure responsible AI adoption and compliance with ethical and regulatory standards, building trust with stakeholders.

Target Audience

- Procurement and Supply Chain Managers
- Sourcing and Logistics Professionals
- Category and Commodity Managers
- Operations and Inventory Planners

- IT and Digital Transformation Leaders
- Risk and Compliance Officers
- Business Analysts and Data Scientists
- Senior Executives and C-level Officers overseeing procurement and supply chain functions

Course Modules

Module 1: Introduction to AI and Digital Transformation in SCM

- Foundations of AI, Machine Learning, and RPA.
- Understanding **Procurement 4.0** and the **digital supply chain**.
- Key **AI technologies** and their relevance to procurement.
- Mapping AI use cases to business challenges.
- Case Study: **General Motors'** digital transformation journey with AI and automation.

Module 2: AI for Strategic Sourcing and Spend Analysis

- Using AI for **supplier discovery** and evaluation.
- Automated **spend classification** and anomaly detection.
- Leveraging predictive analytics for **cost optimization**.
- Applying AI for market intelligence and **price benchmarking**.
- Case Study: How **GE** used AI to analyze spend data and identify millions in savings.

Module 3: AI-Powered Demand Forecasting and Inventory Management

- Fundamentals of **predictive forecasting** with machine learning.
- Optimizing inventory levels to prevent stockouts and overstocking.
- Using AI to manage the **bullwhip effect** in supply chains.
- Integrating AI tools with existing ERP and planning systems.
- Case Study: **Amazon's** use of AI for hyper-accurate demand forecasting and warehouse automation.

Module 4: Intelligent Supplier and Risk Management

- Real-time **supplier risk monitoring** using AI.
- **Predictive risk assessment** for financial, geopolitical, and ESG factors.
- Automating supplier performance and compliance monitoring.
- Enhancing **supplier collaboration** with AI-driven insights.
- Case Study: **Ford Motor Company's** use of AI to predict and mitigate supply chain disruptions.

Module 5: AI in Contract and Vendor Management

- Utilizing **Natural Language Processing (NLP)** for contract review.
- Automating clause extraction, risk flagging, and renewal alerts.
- Implementing AI for **vendor onboarding** and master data management.
- Ensuring contract compliance and auditing with intelligent systems.
- Case Study: A large **financial institution's** use of AI to streamline contract analysis and reduce legal risk.

Module 6: Automation and Logistics Optimization with AI

- Implementing **Robotic Process Automation (RPA)** for P2P processes.
- AI-powered **route optimization** and fleet management.

- Optimizing warehouse operations with intelligent automation.
- Real-time **shipment tracking** and logistics visibility.
- Case Study: **DHL's** implementation of AI to optimize delivery routes and improve efficiency.

Module 7: Generative AI and the Future of Procurement

- Introduction to **Generative AI** and its role in creating content and scenarios.
- Using generative AI for **supplier negotiation** and contract drafting.
- Simulating supply chain scenarios to test resilience.
- Creating automated reports and dashboards with AI.
- Case Study: A **consumer goods company's** use of generative AI for scenario planning and risk modeling.

Module 8: Developing and Implementing an AI Strategy

- Building a business case for AI in procurement and supply chain.
- Addressing **ethical considerations**, bias, and data privacy.
- Creating a phased implementation plan and managing change.
- Measuring **ROI** and demonstrating business value.
- Case Study: How **Coca-Cola** built its AI strategy from pilot to enterprise-wide adoption.

Training Methodology

This course utilizes a **blended learning approach** that combines interactive, expert-led sessions with practical, hands-on application. The methodology includes:

- Instructor-led discussions.
- Real-world case studies.
- Hands-on exercises.
- Group projects and capstone.
- Q&A and open forums: Facilitate peer-to-peer learning and problem-solving.
- Practical application

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
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

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