

AI for Procurement: Spend Analytics, Sourcing and Supplier Risk

26 – 30 April 2027
Vienna

AGILE LEADERS
Training Center

AGILE LEADERS
Training Center

AI for Procurement: Spend Analytics, Sourcing and Supplier Risk

Ref: 113_264733 **Date:** 26 – 30 April 2027 **Location:** Vienna **Fees:** 5700 Euro

Overview

AI for Procurement: Spend Analytics, Sourcing and Supplier Risk is a 1-week course, aligned with the CILT Certificate in AI for Procurement CAIP, for procurement, category and supply chain managers who leave with a working AI use-case roadmap for their function. Procurement teams hold large volumes of spend, supplier and contract data yet still classify, compare and monitor it by hand. The course applies machine learning, predictive analytics and generative AI to each stage of the source-to-pay cycle, with governance built in. AI for procurement at this level is delivered by Agile Leaders Training Center.

Who Should Attend

- Procurement and purchasing staff responsible for sourcing events, supplier selection and purchase orders
- Category managers who own category strategies, spend baselines and savings targets
- Supply chain managers accountable for supplier continuity, lead times and inventory exposure
- Contract and vendor management staff who monitor obligations, renewals and supplier performance
- Procurement analysts and digital transformation leads who build dashboards and select sourcing technology

The course assumes participants already run sourcing or supplier management activities at work, and it leaves out programming and building machine learning models from code.

Departments and Industries

The course serves teams that buy, contract and manage suppliers across public and private sectors.

- Procurement, purchasing and strategic sourcing departments
- Supply chain, logistics and inventory planning departments
- Contracts, legal support and vendor management units
- Oil, gas, utilities and energy operators
- Healthcare, retail, construction and government entities

Learning Objectives

By the end of this course, participants will be able to:

- Analyze procurement spend with AI-based classification and anomaly detection
- Evaluate suppliers using AI-driven discovery, scoring and risk signals
- Apply AI tools to sourcing events, bid comparison and negotiation preparation
- Use contract analytics to extract clauses, obligations and renewal risks
- Build effective generative AI prompts for everyday procurement tasks
- Prioritize AI use cases under a responsible governance and data-quality framework

Course Agenda

Day 1: AI Foundations for the Source-to-Pay Cycle

- Machine Learning, Predictive Analytics and Generative AI Concepts for Buyers
- Mapping AI Use Cases Across the Source-to-Pay Process Map
- Procurement Data Sources: ERP, e-Sourcing and Supplier Master Data
- Data Quality Assessment and Cleansing Checklists for Spend Data
- AI Maturity Assessment for the Procurement Function

Day 2: Spend Analytics and Demand Forecasting

- Automated Spend Classification with UNSPSC Taxonomies
- Spend Cube Design and AI-Driven Savings Opportunity Detection
- Anomaly Detection for Maverick Spend and Duplicate Invoices
- Predictive Demand Forecasting and Price Trend Models
- Spend Analytics Dashboards and KPI Scorecards

Day 3: Supplier Discovery, Risk and Sourcing

- AI-Driven Supplier Discovery and Market Intelligence Scanning
- Supplier Risk Scoring Models and Early-Warning Signals
- AI-Assisted RFx Drafting and Bid Evaluation Matrices
- Negotiation Preparation with Should-Cost Models and Scenario Analysis
- Supplier Performance Monitoring with Predictive Scorecards

Day 4: Contract Analytics, Generative AI and Governance

- Contract Analytics for Clause Extraction and Obligation Tracking
- Prompt Engineering Patterns for Procurement Tasks
- Agentic AI and Automation in Procure-to-Pay Workflows
- Responsible AI Principles: Bias, Transparency and Human Oversight
- AI Governance Policy, Data Privacy Controls and Model Risk Registers

AGILE LEADERS
Training Center

Day 5: Applied AI Procurement Practice and Capstone

- Exercise: Classifying a Sample Spend Dataset and Presenting Savings Findings
- Exercise: Building a Supplier Risk Heat Map from Mixed Data Signals
- Exercise: Drafting an RFP and Negotiation Brief with Generative AI Prompts
- Business Case Template and Benefits Tracking for AI Procurement Initiatives
- Capstone: Presenting an AI Use-Case Roadmap for a Procurement Function

Practical Exercises

The course includes suggested activities that connect each tool to realistic procurement scenarios.

- Suggested activity: classify and cleanse a mixed spend extract and identify consolidation opportunities
- Suggested activity: score a supplier panel for financial, delivery and compliance risk
- Suggested activity: write, test and refine prompts for sourcing and contract review tasks
- Suggested activity: rank AI use cases by value, feasibility and governance risk

FAQs

Who is AI for procurement training suited to, and what does it assume?

It suits procurement, category, contract and supply chain staff who already manage sourcing or suppliers. It assumes working familiarity with purchasing processes and spreadsheets, and it does not require coding skills.

How does AI for procurement differ from a general procurement management course?

A general procurement course covers sourcing strategy and contracting principles. AI for procurement focuses on applying analytics, machine learning and generative AI to those same tasks, and on governing the data and models that support procurement decisions.

How is AI used in spend analytics?

AI classifies transactions into consistent categories, detects duplicate or off-contract spend, and highlights consolidation and savings opportunities faster than manual review, provided the underlying spend data is cleansed and governed.

Can generative AI be used safely for supplier and contract tasks?

Yes, when it runs under clear policies: approved tools, no confidential data in public models, human review of every output and a record of AI-assisted decisions in the procurement file.

AGILE LEADERS
Training Center

Conclusion

Participants return with an AI use-case roadmap for their procurement function, supported by a business case template and a governance checklist. The roadmap turns scattered experiments into a ranked plan for spend analytics, supplier risk and contract work. Teams can then move from manual data handling to faster, better-documented sourcing decisions.