

AI+ Microsoft 365 Copilot Supply Chain Specialty (1 Day)

Program Detailed Curriculum

Executive Summary

The AI+ Microsoft 365 Copilot Supply Chain Specialty™ certification equips learners with the knowledge and practical skills to apply artificial intelligence and Microsoft 365 Copilot across modern supply chain operations. The program explores generative AI fundamentals, supply chain data management, demand forecasting, procurement, supplier management, inventory optimization, logistics, warehousing, manufacturing, digital supply networks, AI agents, predictive analytics, and responsible AI practices.

Learners develop a practical understanding of how Microsoft 365 Copilot, Dynamics 365 Supply Chain Management, Copilot Studio, Power BI, and Power Platform support data analysis, workflow automation, decision-making, and cross-functional collaboration. The certification emphasizes hands-on activities, prompt engineering, AI-assisted planning, agentic workflows, data protection, human oversight, and responsible AI adoption. Case studies and capstone projects connect AI capabilities with real-world supply chain challenges, supporting operational efficiency, supply chain resilience, supplier performance, risk management, and sustainable business transformation.

Prerequisites :

- **Supply Chain Fundamentals:** Understand basic supply chain concepts, including demand planning, procurement, sourcing, inventory management, logistics, warehousing, manufacturing, and supplier relationships.
- **AI Fundamentals:** Recognize basic artificial intelligence, machine learning, generative AI, and large language model concepts and their potential applications in supply chain operations and decision support.
- **Data Literacy:** Understand basic data types, spreadsheets, charts, dashboards, data quality, and the interpretation of supply chain performance indicators, operational trends, and business metrics.
- **Mathematics and Statistics Awareness:** Understand percentages, averages, comparisons, correlations, forecasting concepts, and basic statistical measures used to interpret supply chain data and evaluate AI-generated insights.
- **Microsoft 365 and Digital Tool Familiarity:** Be comfortable using Microsoft 365 applications such as Excel, Word, PowerPoint, Outlook, and Teams, navigating dashboards, working with business datasets, and following guided analytical workflows.
- **Responsible AI Awareness:** Recognize the importance of data privacy, security, fairness, transparency, accountability, human oversight, and responsible use of AI-generated recommendations in supply chain decision-making.

Module 1

Foundations of AI and Microsoft 365 Copilot in Supply Chain

1.1 Understanding AI and Copilot in Supply Chain Contexts

Understand the foundations of artificial intelligence, generative AI, large language models, and Microsoft 365 Copilot in supply chain operations. Learners will explore the Microsoft Copilot ecosystem, embedded and standalone AI experiences, traditional automation, custom agents, and retrieval-augmented approaches that support operational efficiency and informed decision-making.

1.2 The AI Transformation of Supply Chain Operations

Explore how AI and Microsoft 365 Copilot transform demand planning, procurement, inventory management, logistics, warehousing, and manufacturing. Learners will understand how digital supply chain assistants, procurement agents, supplier communication agents, and intelligent automation improve collaboration, streamline workflows, and support the transition toward agentic supply chain operations.

1.3 Supply Chain Data and Copilot Readiness

Learn about structured, unstructured, and alternative supply chain data sources and their importance in AI-assisted operations. Learners will explore Microsoft Graph, Microsoft Fabric, and Dataverse while understanding data quality, lineage, observability, access controls, and organizational readiness requirements for reliable and responsible Copilot adoption.

1.4 Copilot Literacy for Supply Chain Professionals

Understand how supply chain professionals identify high-value Copilot applications and evaluate AI-generated recommendations. Learners will explore prompt interpretation, response accuracy, hallucination detection, reproducibility, and the trust, verify, escalate, and override framework while developing skills to communicate AI-assisted decisions responsibly to stakeholders.

Module 2

Microsoft 365 Copilot for Supply Chain Planning and Analysis

2.1 Demand and Supply Planning with Copilot

Explore how Microsoft 365 Copilot supports demand forecasting, trend analysis, anomaly detection, and supply planning using Excel. Learners will understand sales and operations planning, variance commentary, price-demand relationships, available-to-promise decisions, capable-to-promise decisions, and scenario comparisons to support informed planning and inventory decisions.

2.2 Generative AI Across the Microsoft 365 Workflow

Learn how generative AI and effective prompt engineering enhance supply chain workflows across Microsoft 365 applications. Learners will explore Copilot in Word, Excel, PowerPoint, Outlook, and Teams for generating reports, drafting sourcing documents, preparing supplier communications, summarizing meetings, and coordinating cross-functional activities.

2.3 Predictive and Decision Intelligence

Understand how Copilot-assisted analytics support demand forecasting, inventory planning, service-level evaluation, and operational decision-making. Learners will explore predictive insights, scenario planning, sensitivity analysis, sourcing decisions, capital allocation, and Power BI dashboards to interpret supply chain performance and communicate recommendations to business stakeholders.

2.4 Retrieval-Augmented Copilot Agents in Supply Chain

Explore retrieval-augmented generation and its role in connecting Copilot agents with trusted enterprise information. Learners will understand how SharePoint, Dataverse, Microsoft Fabric, and internal knowledge repositories support document-grounded supplier analysis, contract interpretation, policy assistance, source citations, and reliable supply chain decision support.

Module 3

Copilot for Procurement, Sourcing, and Supplier Management

3.1 AI in Digital Procurement and Sourcing

Understand how AI and Microsoft 365 Copilot improve digital procurement, supplier onboarding, qualification, and sourcing activities. Learners will explore conversational sourcing assistants, RFx drafting, procurement agents, supplier communication agents, and automated workflows while recognizing the importance of human approval in purchasing and supplier selection decisions.

3.2 Supplier Risk and Performance Intelligence

Explore how AI supports supplier performance monitoring, risk identification, and procurement decision-making. Learners will understand supplier scorecards, financial health indicators, external risk signals, contract analysis, negotiation preparation, and responsible supplier evaluation practices that improve sourcing reliability, supplier relationships, and supply chain resilience.

3.3 Copilot in Dynamics 365 Supply Chain Management

Learn how Copilot capabilities within Dynamics 365 Supply Chain Management assist procurement and operational workflows. Learners will explore purchase order collaboration, inventory and order exception summarization, supplier correspondence, replenishment triggers, and agentic procurement while understanding how automation supports efficiency and controlled operational decisions.

3.4 Category Management and Spend Intelligence

Understand how Copilot-assisted analytics improve category management, purchasing visibility, and strategic sourcing decisions. Learners will explore spend analysis, supplier segmentation, total cost of ownership, sourcing recommendations, cost-saving opportunities, and supplier consolidation or diversification strategies to support procurement optimization and responsible resource allocation.

Module 4

Copilot for Logistics, Warehousing, and Risk Management

4.1 Modern Supply Chain Risk Management

Explore how AI improves supply chain risk identification, monitoring, prediction, and response. Learners will understand predictive disruption analytics, early-warning systems, scenario modeling, network stress testing, automated exception management, and risks associated with autonomous logistics systems while examining approaches to improve operational resilience.

4.2 Logistics and Transportation Analytics

Understand how AI and Copilot support transportation visibility, shipment tracking, and logistics performance analysis. Learners will explore delivery delay predictions, route optimization, carrier performance insights, freight anomaly detection, last-mile delivery monitoring, and automated exception summaries that improve transportation planning and operational coordination.

4.3 Warehouse, Manufacturing, and Inventory Intelligence

Learn how AI supports warehouse operations, inventory management, and manufacturing performance. Learners will explore intelligent picking, slotting, replenishment, inventory rebalancing, labor planning, cycle counting, predictive maintenance, quality analytics, and production scheduling while understanding how continuous monitoring improves operational accuracy, productivity, and resource utilization.

4.4 Cybersecurity and Data Protection for Copilot in Supply Chain

Understand cybersecurity risks associated with Microsoft 365 Copilot, AI agents, and connected supply chain systems. Learners will explore prompt injection, data leakage, information oversharing, third-party integrations, secure connectors, Microsoft Purview, permissions management, and security controls required to protect sensitive enterprise information.

Module 5

Copilot Studio and Agentic Supply Chain Workflows

5.1 Introduction to Copilot Studio for Supply Chain

Understand Microsoft Copilot Studio as a low-code platform for developing customized supply chain agents. Learners will explore agent architecture, topics, triggers, conversational flows, knowledge sources, Model Context Protocol, enterprise data connectivity, testing, publishing, and responsible management of AI agents across business workflows.

5.2 AI Agents and Autonomous Supply Chain Workflows

Explore how AI agents automate supply chain activities through reasoning, tool usage, and coordinated task execution. Learners will understand planning, sourcing, logistics, and exception-management agents, multi-agent orchestration, supervisor-specialist architectures, and operational risks including goal drift, hallucinations, cascading errors, and workflow failures.

5.3 Human Oversight and Governance for Agentic Workflows

Learn how human oversight frameworks support responsible autonomous supply chain operations. Learners will explore human-in-the-loop, human-on-the-loop, and human-in-command approaches, approval checkpoints, escalation thresholds, rollback procedures, and accountability measures for managing financially significant or operationally consequential AI-driven decisions.

5.4 Power Platform Integration with Copilot

Understand how Microsoft Power Platform integrates with Copilot Studio to automate supply chain processes and support decision-making. Learners will explore Power Automate, AI Builder, Power Apps, and Power BI for document processing, exception-triggered workflows, approval management, operational dashboards, and responsible low-code automation.

Module 6

Digital Supply Networks, Manufacturing, and Emerging Technology

6.1 Digital Supply Network Foundations

Explore the foundations of connected digital supply networks and their role in modern supply chain transformation. Learners will understand digital twins, control towers, real-time network visibility, IoT sensors, data integration, simulation models, and organizational adoption strategies for intelligent supply chain monitoring and coordination.

6.2 AI in Manufacturing and Production Planning

Understand how AI and Copilot improve manufacturing operations through production scheduling, capacity planning, and predictive analytics. Learners will explore predictive maintenance, quality monitoring, manufacturing exception detection, root-cause analysis, and AI applications across discrete, process, and mixed-mode manufacturing environments to improve operational performance.

6.3 Sustainability, ESG, and Circular Supply Chains

Learn how AI supports sustainable supply chain operations, environmental performance, and responsible resource management. Learners will explore emissions tracking, environmental, social, and governance reporting, circular supply chain models, reverse logistics analytics, and Copilot-assisted sustainability disclosures that support data-informed sustainability decisions.

6.4 Emerging Technologies Shaping Supply Chain

Explore emerging technologies transforming supply chain intelligence, automation, and connected operations. Learners will understand multimodal AI, physical AI, robotics, intelligent warehousing, time-series foundation models, domain-specific language models, and synthetic data while examining their applications in forecasting, simulation, operational monitoring, and decision support.

Module 7

Governance, Responsible AI, and Supply Chain Transformation

7.1 Responsible AI and Copilot Governance

Understand responsible AI principles and their application across supply chain operations. Learners will explore fairness, transparency, accountability, explainability, privacy, security, reliability, human oversight, bias identification, risk classification, documentation, auditability, and ethical decision-making in procurement, forecasting, logistics, and workforce management.

7.2 Microsoft 365 Copilot Governance and Data Protection

Explore how organizations manage Microsoft 365 Copilot adoption through enterprise security, data protection, and access controls. Learners will understand licensing, user permissions, Microsoft Purview, sensitivity labels, Data Loss Prevention, audit capabilities, compliance requirements, and controlled deployment practices for protecting sensitive supply chain information.

7.3 AI Strategy and Supply Chain Operating Models

Learn how organizations develop AI adoption strategies and operating models for supply chain transformation. Learners will explore Copilot implementation roadmaps, change management, Centres of Excellence, stakeholder responsibilities, emerging AI roles, adoption maturity, performance monitoring, and continuous improvement to support scalable AI-enabled operations.

7.4 Building a Copilot-Enabled Supply Chain Function

Understand how organizations design and manage Copilot-enabled supply chain functions by integrating enterprise data, AI agents, workflow automation, and operational systems. Learners will explore human oversight, governance controls, observability, performance measurement, and cross-functional collaboration to establish reliable and accountable AI-assisted supply chain processes.

Module 8

Capstone – Copilot-Enabled Supply Chain Transformation and Governance

8.1 Capstone

Explore the integration of Microsoft 365 Copilot, Dynamics 365, Copilot Studio, and Power Platform in practical supply chain transformation projects. Learners will understand how AI-assisted planning, procurement, inventory management, logistics, agentic workflows, data governance, and responsible AI principles combine to address operational challenges.

8.2 Capstone Objectives

Understand the process of identifying supply chain challenges, assessing existing workflows, and designing Copilot-enabled solutions. Learners will explore business requirements, data sources, agent responsibilities, automated actions, approval checkpoints, governance controls, testing, performance indicators, and business-value measurement to develop practical AI implementation plans.

8.3 Capstone Project Tracks

Explore practical capstone projects involving AI-powered demand planning and inventory management, procurement and supplier risk analysis, and supplier communication workflows. Learners will apply Excel, Microsoft 365 Copilot, and Copilot Studio to design solutions, evaluate recommendations, implement human oversight, and present measurable business outcomes.