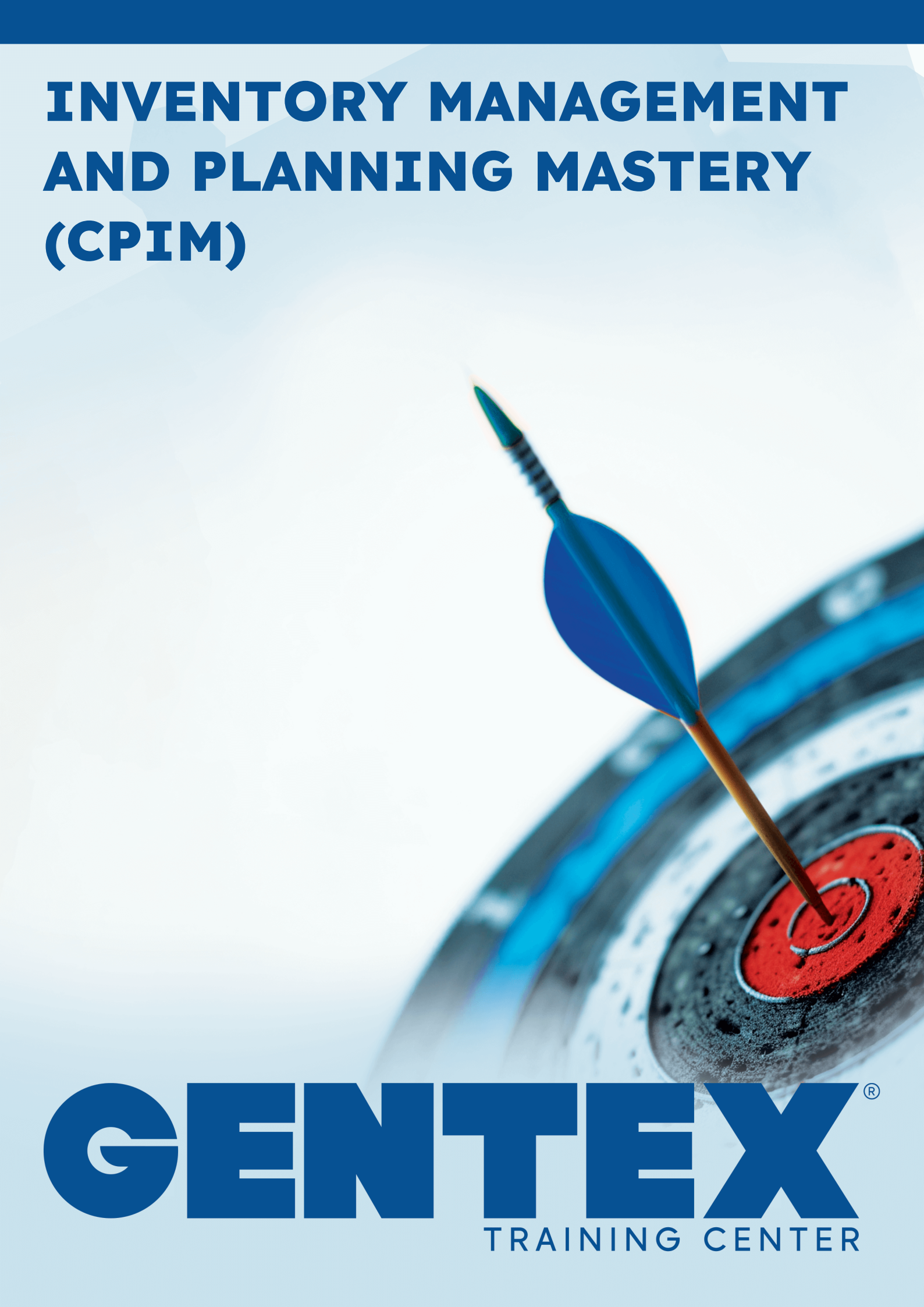
INVENTORY MANAGEMENT AND PLANNING MASTERY (CPIM)



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TRAINING CENTER

GENTEX Training Center LLC | Orlando - FL, USA
Info@gentextraining.com

Introduction

Inventory planning connects demand, supply, and cash through one set of decisions, and getting those decisions right separates a smooth operation from a permanent firefight. This Inventory Management and Planning Mastery (CPIM) Training Course gives planners, inventory controllers, and supply chain professionals a structured method built on the APICS CPIM body of knowledge. Participants learn how to build demand plans, run the sales and operations planning cycle, set inventory policy by item class, schedule production with master scheduling and MRP, and measure planning performance properly. Furthermore, the course links planning decisions to capacity, distribution, and financial outcomes, so plans survive contact with real suppliers and real customers.

Inventory Management and Planning Mastery (CPIM) Course Objectives

- Apply the APICS CPIM body of knowledge across planning, execution, and control.
- Build demand plans using quantitative forecasting and consensus review.
- Run the sales and operations planning (S&OP) cycle from demand review to executive sign-off.
- Develop a master production schedule (MPS) with time fences and capacity checks.
- Run material requirements planning (MRP) with correct lead times, lot sizing, and safety stock.
- Classify inventory by ABC and XYZ logic and set policy per class.
- Calculate safety stock, reorder points, and order quantities for stock and dependent demand.
- Plan distribution requirements across warehouses, branches, and central stock.
- Apply lean and Just-in-Time principles to inventory and flow.
- Measure forecast accuracy, plan stability, and schedule adherence with standard metrics.

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Course Methodology

- Facilitated sessions built on worked planning examples with real demand and BOM data.
- Spreadsheet and ERP screen drills on forecasting, MRP, and capacity checks.
- Case workshops on forecast bias, plan instability, and shortage recovery.
- Simulation of a monthly S&OP meeting from demand review to supply consensus.
- Group exercise on an inventory policy reset with service and cost targets.

Who Should Take This Course

- Demand, supply, and production planners.
- Inventory controllers and stock analysts.
- Supply chain and operations managers.
- Procurement and materials planning staff.
- ERP planning module users and master data owners.
- Finance and audit staff reviewing inventory and planning assumptions.

Inventory Management and Planning Mastery (CPIM) Course Outlines

Day 1: Planning Framework and Demand Management

- Planning horizons: strategic, tactical, and operational.
- Demand sources: orders, forecasts, and dependent demand.
- Quantitative forecasting: moving average, exponential smoothing, and seasonal indices.
- Qualitative input: sales intelligence, promotions, and market signals.
- Consensus demand planning and the demand review step.

- Forecast accuracy measures: MAPE, bias, and forecast value added.
- Managing new products, phase-outs, and demand shaping.

Day 2: Sales and Operations Planning and Master Scheduling

- The five steps of the S&OP cycle and their meeting structure.
- Balancing demand, supply, and financial plans.
- Supply response options: overtime, subcontracting, shifts, and inventory.
- Master production schedule design and time fences.
- Rough-cut capacity planning and resource loading.
- Plan stability, frozen zones, and change control.
- Executive review, decision log, and plan communication.

Day 3: Material Requirements Planning and Capacity

- MRP logic: gross to net requirements, lead time offsetting, and exploding.
- Bills of material and planning bills.
- Lot sizing rules: fixed order quantity, EOQ, period order quantity, and lot-for-lot.
- Safety stock, scrap, and yield factors in MRP.
- Capacity requirements planning and bottleneck management.
- Pegging, exception messages, and action reports.
- Master data accuracy: lead times, routings, and item status.

Day 4: Inventory Policy, Lean Practice, and Distribution

- Independent versus dependent demand and the different control logic.
- ABC and XYZ classification and policy setting per class.

- Reorder point, periodic review, and min-max systems.
- Safety stock calculation under uncertainty in demand and lead time.
- Just-in-Time, kanban, and pull systems in inventory control.
- Distribution requirements planning (DRP) across the network.
- Excess, obsolete, and slow-moving inventory control.

Day 5: Performance Measurement and Continuous Improvement

- Planning KPIs: forecast accuracy, plan attainment, and schedule adherence.
- Inventory KPIs: turnover, days of supply, fill rate, and stockout rate.
- Service level targets and the trade-off with holding cost.
- Inventory record accuracy and cycle counting practice.
- ERP planning reports, exception dashboards, and action prioritisation.
- Root cause analysis of chronic shortages and excess.
- Building an annual planning and inventory improvement plan.

Conclusion

By successfully completing the Inventory Management and Planning Mastery (CPIM) Training Course, participants will have acquired a thorough working knowledge of demand planning, sales and operations planning, master scheduling, material requirements planning, inventory policy design, lean inventory practice, distribution planning, and planning performance measurement. They will leave able to produce plans that hold under change, set inventory parameters that match demand behaviour, and lift service levels without inflating stock. Gentex Training Center delivers this programme with supply chain practitioners who run these planning cycles in live operations.

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FAQs for the Inventory Management and Planning Mastery (CPIM) course

Q1 What is the "Inventory Management and Planning Mastery (CPIM)" course about?

It is a five-day programme on planning demand, supply, and inventory together, built on the APICS CPIM body of knowledge. It covers forecasting, sales and operations planning, master scheduling, material requirements planning, inventory policy design, distribution planning, and performance measurement.

Q2 What are the key benefits of the "Inventory Management and Planning Mastery (CPIM)" course?

Participants produce more accurate demand plans, cut chronic shortages and excess stock, and improve schedule adherence. They also gain a working S&OP cycle, cleaner planning data, and inventory policies that raise service levels while releasing cash.

Q3 What skills will I gain from the "Inventory Management and Planning Mastery (CPIM)" course?

You will gain demand planning and forecast accuracy management, sales and operations planning with master scheduling, material requirements planning and capacity checking, and inventory policy and distribution planning with performance measurement.

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Q4 What tools, methods, or standards are covered in the "Inventory Management and Planning Mastery (CPIM)" course?

The course works with the APICS CPIM body of knowledge, moving average and exponential smoothing forecasts with seasonal indices, MAPE and forecast value added measures, the five-step S&OP cycle, master production scheduling with time fences and rough-cut capacity planning, MRP with lot sizing rules and lead time offsetting, bills of material and planning bills, ABC and XYZ classification, safety stock and reorder point models, Just-in-Time and kanban pull systems, distribution requirements planning, and ERP planning exception reports.

Q5 How is the "Inventory Management and Planning Mastery (CPIM)" course applied in real-world practice?

Teams apply it when preparing the monthly demand review, adjusting MRP parameters after a lead time change, resetting stock policies for a fast-moving line, and recovering from a shortage. It also guides capacity decisions, distribution planning across branches, and planning KPI reporting.