# PROGRAMME DES CERTIFICATIONS DE L'APICS

Résumé. – Cette annexe présente le contenu des 3 certifications de l'APICS actuellement en vigueur : BASICS (Basics of Supply Chain Management), CPIM (Certified in Production and Inventory Management et la plus récente), CSCP (Certified Supply Chain Profesionnal). La certification BASICS constitue le premier module de la certification CPIM : elle est considérée en France comme une certification à part entière. La certification CIRM (Certified in Integrated Resources Management) a été retiré du marché en 2007.

# 1. APICS Basics of Supply Chain Management (BASICS)

This module covers basic concepts in managing the complete flow of materials that represents a supply chain from suppliers to customers. The Basics module introduces supply chain concepts and emphasizes basic terminology, but it also covers relationships among activities in the supply chain.

## 1.1 Participant Profile

This program is appropriate for young professionals with little experience in Supply Chain management, Professionals who are not directly involved in the Supply Chain or Logistics functions of their companies, Logistics or Supply Chain actors who prefer to test their knowledge objectively before undertaking the full CPIM course, Company managers and department heads needing a rapid introduction to the fundamentals of Supply Chain Management, Supply Chain professionals wanting to share a common company culture and terminology in the field of Supply Chain management, Engineering and Sales undergraduate students wishing to acquire the key terminology and the fundamental concepts of Supply Chain management as they are used in companies

#### 1.2 Course Description

The Basics module is divided into 4 main areas:

Businesswide concepts: this section of the outline covers basic businesswide concepts, including the various production environments used for the transformation process and financial fundamentals. Three of the common companywide management approaches (MRP II, JIT and TQM) are individually presented, together with their interrelationships.

- ⇒ Organization Fundamentals: Elements of the Supply Chain, Internal organizational dynamics.
- ⇒ Operating Environments: Customer expectations, cumulative lead times, inventory, product life cycle, Process choices, Impact of product design, Production environment.
- ⇒ Financial Fundamentals : Statements, Costs, Analysis.
- ⇒ Manufacturing Resource Planning (MRP II): Objectives, key principles and characteristics.
- ⇒ Just-in-Time (JIT): Objectives, key principles and characteristics, Concepts of waste and value-added activity.
- ⇒ Total Quality Management (TQM): Objectives, key principles and characteristics.
- ⇒ Impact of Environment on System Design and Deployment.

Demand planning: this section covers demand planning, including a basic understanding of markets and customer expectations, the definition of value, and a fundamental overview of demand forecasting.

- ⇒ Marketplace-Driven: Customers, Competitors, Economy and regulatory policy.
- ⇒ Customer expectations and definition of Value: Order winners/qualifiers, Marketing strategy.
- ⇒ Customer relationships: Expanding product/service offerings, Design assistance, Information/communication.
- ⇒ Demand Management: Sources of demand, Forecast management, Distribution requirements planning (DRP).

Transformation of demand into supply: this section includes the design, management, and control of the transformation process itself.

- ⇒ Design: Manufacturing feasibility, Planning parameters, Data sources and data accuracy, Functional responsibilities.
- ⇒ Capacity Management: Resources, Measuring capacity, Capacity Planning, Bottlenecks/constraints.
- ➡ Planning (objectives, inputs, and outputs): Strategic planning and business planning, Sales and operations planning/production planning, Master scheduling and rough-cut capacity planning (RCCP), Material requirements planning (MRP) and capacity requirements planning.
- ⇒ Execution and control: Customer service, Linkages to the master schedule, Work-in-process, Quality assurance.
- ⇒ Performance measurements, Strategic and tactical.

Supply: this section is devoted to supply issues. These include the concepts of inventory, purchasing and physical distribution

- ⇒ Inventory: Categories, Functions, Dependent versus independent demand systems Management, Order systems, Cost analysis.
- ⇒ Purchasing: Receiving and analyzing notification of need, Selecting suppliers, Supplier agreements, Order management, Monitoring and supplier performance.
- ⇒ Physical Distribution System: Transportation, Warehousing, Distribution Inventory, Interfaces with production, marketing, and finance.

# 2. APICS Certified in Production and Inventory Management (CPIM)

These courses provide training on optimizing inventory investment, delivering Just-in-Time products and services, streamlining operations through accurate forecasting, setting and achieving goals, managing all aspects of the supply chain, and maximizing ROI on systems and technologies.

## 2.1 Participant Profile

These courses are appropriate for professionals with experience in or academic knowledge of production and inventory management who would like to gain knowledge of standards.

#### 2.2 Course Descriptions

The certification is divided into 5 modules and exams:

Basics of Supply Chain Management: this course covers concepts in managing the complete flow of materials in a supply chain and provides a complete overview of material flow from internal and external suppliers to and from an organization. After completing the course, participants will understand the role, objectives, and responsibilities of materials management; be able to describe basic forecasting principles and techniques; understand the functions of production planning and master scheduling; and describe the objectives of capacity management and how it relates to priority planning.

Master Planning of Resources: sales and operations planning processes used to develop production plans and identify and assess internal and external demand and forecasting requirements are explored in this course. Participants will focus on producing achievable master schedules that are consistent with business objectives; be able to explain the master planning model and key planning elements; identify customer service policies, techniques for communicating with customers, and measurements of forecast accuracy; and understand the concept of multilevel master scheduling.

Detailed Scheduling and Planning: this course focuses on techniques for material and capacity scheduling and includes detailed descriptions of material requirements planning (MRP), capacity requirements planning (CRP), inventory management practices, and procurement and supplier planning. Participants will learn to identify types of inventory and their impact on the planning process; describe order review methodologies, safety-stock processes, and effects of inventory on investment; and understand the concepts essential for supplier partnerships and product development.

Execution and Control of Operations: this course focuses on the areas of prioritizing and sequencing work, executing work plans and implementing controls, reporting activity results, and providing feedback on performance. The course explains techniques for scheduling and controlling production processes, the execution of quality initiatives and continuous improvement plans, and the control and handling of inventories.

Strategic Management of Resources: in this course, participants will explore the relationship of existing and emerging processes and technologies to manufacturing strategy and supply chain-related functions. The course addresses three main topics: aligning resources with the strategic plan, configuring and integrating operating processes to support the strategic plan, and implementing change.

# 3. APICS Certified Supply Chain Professional (CSCP)

These courses provide training in the areas of supplier and customer relations, international trade, the use of information technology, and physical logistics.

## 3.1 Participant Profile

This program is appropriate for professionals with experience with supply chain functions or ERP systems who are interested in increasing their knowledge and expertise in the field of supply chain management.

## 3.2 Course Description

The course is divided into 4 main areas:

Module 1: Supply Chain Management Fundamentals

- ⇒ Explore how successful supply chain management adds value to your organization
- ⇒ Learn how to develop a supply chain strategy that aligns with corporate strategy
- ⇒ Understand the importance of supply chain design and its continually evolving capabilities

Module 2: Building Competitive Operations, Planning, and Logistics

- ⇒ Understand natural dynamics within the supply chain to optimize performance and increase profitability
- ⇒ Know the distribution and transportation options and how to align them with supply chain strategy
- ⇒ Evaluate the process constraints and choices within global logistics to establish a plan linked to overall strategy

#### Module 3: Managing Customer and Supplier Relationships

- ⇒ Learn how to categorize customers based on their profiles and needs
- ⇒ Establish measures of customer satisfaction
- ⇒ Understand the strategic importance of purchasing and supplier relationships
- ⇒ Effectively use customer data to improve service performance and increase value to suppliers and customers

#### Module 4: Using Information Technology to Enable Supply Chain Management

- ⇒ Learn how technology-enabled supply chains contribute to business strategies and operating plans
- ⇒ Understand the innovative technologies enabling collaborative commerce and global visibility
- ⇒ Apply technology to enhance distribution, reverse logistics, and global supply chain communications