

CPF: Certified Professional Forecaster

Course content and objectives

The CPF certification's goal is to validate knowledge of basic forecasting principles and demand planning. It covers the diverse activities related to the forecasting and demand planning of finished products, service parts and service activities.

The CPF programme is based on the best practices of forecasting in companies world-wide

At the end of the course, participants should be able to:

- position forecasts in a demand planning and management system
- take into consideration the particular characteristics of each industrial context (new products, service parts) and choose to utilise the most appropriate forecasting techniques accordingly
- implement solutions to optimise inventory and improve customer service levels.

Public concerned

The CPF programme is for:

- Forecasting experts who need to consolidate and review their experience and knowledge, to be aware of state of the art and best practices
- Marketing managers who need to understand the magnitude of their markets and the importance and complexity of the factors influencing them
- Sales directors who know how important lead time reliability and forecast accuracy have become
- Purchasing and production managers who need to understand the forecast mechanism in order to efficiently work with their suppliers
- Finance managers who need consistency between forecast and budget data
- Consultants, software developers and systems integrators who need to advise their clients on the best forecasting methods and practices
- Teachers needing to propagate best practices

Level of recognition

The CPF is an IBF (The Institute of Business Forecasting and Planning: www.ibf.org) certification. Set up more than 20 years ago, IBF is the most well-known forecasting organization worldwide. IBF is recognised as a leading source of business information, forecasting, planning, demand and supply chain management. IBF :

- Organizes conferences and courses world-wide
- Publishes the Journal of Business Forecasting and has available online a Job Opportunity Bulletin

Today, the CPF certification has become a reference amongst forecasting experts.

In Europe, MGCM introduced the CPF certification in 2009 and it is steadily gaining the same amount of recognition as the other professional certifications for which MGCM provides courses.

How the course is conducted?

Prerequisites: Participants are required to have a minimum of two years work experience, a knowledge of the statistical functions of EXCEL and of the basic principles of planning developed in the BASICS of Supply Chain Management certification delivered by APICS (see www.mgcm.com/basics.htm for more details on the programme). A sound understanding of written English is strongly recommended

Course length: MGCM's CPF course is a 3-day course. The exam for the three modules is held in a single day. A total of 28 hours in terms of participant presence is required.

The course is spread out over a period of 1,5 to 2 months. The 4 days are split into 2 x 2 days: 2 consecutive days at the beginning of the course, a break of a month to six weeks during which participants are expected to work on a set of books received at the beginning of the course. The course ends with a final day of group work immediately followed by the exams on the following day.

In other words, the course includes 2 types of activities:

- Group work with the instructor. A lot of work is done with multiple choice questions that cover the programme. The group networks, sharing diverse experiences and professional knowledge. Excel is primarily used as a tool for forecasting. The instructor serves as a facilitator and change agent.
- Between the group sessions, participants are expected to follow a study programme and read the books and training aids provided at the beginning of the course

The 3 exams (2 hours each) which comprise multiple choice questions are taken on the fourth day.

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Module 1: What you need to know about business forecasting

Role of forecasting in business

Why forecasting is important
How forecasting is used by different functions
Role of a forecaster/demand planner

The forecasting process

Role of management in forecasting
Forecasting requirements
Forecasting process
Forecasting approach
Reconciliation of bottom-up and top-down forecasts
Role of judgment in forecasting
Demand management/demand planning
Forecasting and marketing research
Managing forecast uncertainty & risk

Collaborative process

Sales and Operations Planning (S&OP)
Vendor Managed Inventory (VMI) program
Collaborative Planning, Forecasting and Replenishment (CPFR)
Consensus forecasting
Jointly Managed Inventory (JMI)
Efficient Consumer Response (ECR)
Enterprise Resource Planning (ERP)
Effect of forecast accuracy on the supply chain, inventory turns, and the bottom line

Module 2: Data sources data analysis and treatment, and time series

Data

Types of data: shipment data, order data, syndicated/POS data, etc.
“Slicing and dicing of data”
Sources of data and data collection
Data analysis and data treatment
What to look for in the data — inconsistency in the data, seasonality, extreme values, structural change, data integrity, etc.
How to handle different problems in the data including inconsistency in the data, seasonality, number of days in a month, extreme values and structural change

Types of models

Time-series models
Cause-and-effect models
Judgmental models
(Only general understanding is needed, except for time-series models)

Time series models

Averages, weighted averages, and moving averages
Exponential smoothing (single, double and triple)
Trend
Classical decomposition
Cumulative sales index

Forecast accuracy

Forecasting metrics
Tracking and improving forecasting performance
Selection and maintenance of a forecast model
Aggregation and disaggregation of forecasts
Consolidating SKUs into categories, and categories into overall total
Disaggregating the overall total into categories and categories into SKUs

Module 3 : Forecast reporting and presentation

Selling (buy-in) forecasts to end users
Politics of forecasting
Translating technical material into simple language
Validating forecasts (i.e., Why you think the forecast is accurate?)
Balance score cards and how they impact inventory