

INVENTORY PLANNING

24 class hours (1 class hour is 45 minutes)

WHO IS IT FOR?

The course is recommended to professionals working in the field of procurement, production or sales, and for professionals who are involved in inventory management and order scheduling. In addition, professionals working in the field of production logistics, logistics planning, logistics controlling and in the field of trade in connection with requirements planning also belong to the indirect target group.

Based on their job descriptions, the following specialists might require our inventory planning course:

- material inventory managers/specialists
- finished products inventory managers/ specialists
- logistics planners
- logistics/supply chain experts
- forecasters
- production planners
- capacity planners
- logistics controllers

COURSE AIMS

The aim of our course is to ensure that after its successful completion the participants will be able to understand and plan the inventory processes serving the companies' material processes.

COURSE UNITS

- The scope of input data required for inventory planning
 - Where do the input data come from?
 - The data preparation process preceding inventory planning
 - The statistical methods of the production of input data – **data collection, analysis and preparation tasks**
- The logic of the classification of goods from the perspective of inventory management
 - The interpretation of classification dimensions, the introduction of classification methodologies (ABC, XYZ, SFACC)
 - The timeliness and the dynamic characteristic of classification
 - The visualization and results of multidimensional analyses, the division and interpretation of the suggested categories, the introduction of product categorization systems – **practical example** on complex product categorization, **practice of product categorization methods**
- Inventory management strategies
 - The interpretation of inventory management as a regulating system
 - The scope of applicable regulating parameters
 - The introduction and interpretation of multivariable inventory management strategies, and assigning them to product categories
 - The optimization options of regulating parameters
- Inventory management costs
 - The role of inventory management costs in inventory management

- The applicable cost factors
- The allocation of fixed and variable costs
- The role and structure of the cost model
- The impact of unit costs, predictability and uncertainty on costs
- Cost optimizing inventory management models – **practical example** on the determination of inventory management costs and the use of cost optimization models, **practice of the application of cost-based inventory management models**
- Reliability
 - The role of reliability in inventory management
 - The interpretation of reliability and availability, the role of measurable inventory management processes
 - The interpretation of statistically characterized uncertainty
 - The interpretation of fluctuations which can be characterized as 'normal'
 - Probability theory questions regarding the application of the safety factor
 - The calculation of the safety factor
 - The price of reliability, what does reliability cost, the relationship of inventory management costs and reliability
 - Reliable inventory management models – **practical example** on the application of reliable models, **practice of the use of models**
- The MPR systems and inventory management
 - The interpretation of the inventory optimization potentials in dependent demand
 - The role of cost-based and reliable inventory management models in the upload of MRP records
- Inventory management and IT
 - Input data
 - Performance measurement
 - Reports
 - Statistics
 - The compatibility of inventory optimization algorithms, modern optimization methods in inventory management
- **Computer inventory simulation practice** – game, parameter task, assessment