Syllabus of Module

8. Simulation of Business Processes and Systems

Lecturer: Ing. Pavel Scholz

Module Annotation

This module focuses on introducing computer simulation – a tool that supports the analysis, improvement, and optimization of business processes and systems, not only in manufacturing and logistics. Given the increasing complexity and dynamism of business operations, this tool is becoming ever more essential for responsible decision-making, as traditional analytical tools and methods are no longer sufficient. At the same time, simulation tools have become more accessible in recent years due to various factors – growing usage, reduced costs, and lower knowledge requirements – making them no longer exclusive to large enterprises. Today, simulation can be effectively utilized by managers, industrial and process engineers, designers, planners, technologists, and other professionals in both large corporations and small to medium-sized enterprises.

Module Objective

1. Introduce the concept of computer simulation, its advantages and limitations, and areas of application.

2. Familiarize students with the methodology of developing a simulation project.

3. Provide an overview of simulation implementation strategies and the simulation software currently available on the market.

4. Gain practical experience with one of the simulation software tools.

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