

Cybersecurity in Manufacturing (IC-CYBERSEC)

Short Description

This training provides a comprehensive overview of cybersecurity in manufacturing operations from the perspective of both production operators and machine manufacturers. It focuses on currently valid and upcoming legislation related to cybersecurity in industrial environments, relevant industrial standards, and practical concepts for protecting manufacturing systems. The second part of the training is dedicated to hands-on demonstrations showing how to apply security techniques, principles, and procedures directly within industrial automation and manufacturing network environments. The course combines theoretical knowledge with practical examples to give participants a clear understanding of how to implement and operate cybersecurity measures in a real manufacturing facility.

Objectives

Participants will gain a comprehensive understanding of the key aspects of cybersecurity in manufacturing, including differences between IT and OT, legislative requirements (NIS2, CRA), essential standards, and practical protection concepts for industrial environments. The training also includes practical demonstrations of security techniques and provides materials to support the introduction or further development of cybersecurity in manufacturing.

Target Group

- Cybersecurity managers in manufacturing
- Personnel responsible for production security or digitalization
- Manufacturing technicians and engineers
- Industrial network administrators
- Machine builders and automation integrators
- IT specialists beginning to work with operational technology (OT)
- Technicians and staff interested in cybersecurity in manufacturing

Content

The course covers the fundamentals of cybersecurity in manufacturing, including differences between OT and IT and typical threats and vulnerabilities of manufacturing systems. Participants will learn about current legislation and practical security concepts such as segmentation, access control, monitoring, and backup strategies. The training also includes a hands-on section where participants can practice applying the presented concepts using model scenarios from real manufacturing environments.

Prerequisites

- Technical thinking
 - Basic understanding of manufacturing digitalization
 - Awareness of industrial network operations and industrial communication protocols
 - Basic IT knowledge (network concepts, access management, basic security concepts)
- Advanced IT security knowledge is not required — all topics are explained with regard to practical needs in industrial environments.

Type

Face-to-face training

Duration

2 days

Language

cs

Fee

14,900 CZK