

School Industry 4.0

Source / Link:
<https://www.siq.si>

Thematic area:

- Transversal competences
- Technical skills
- Creative skills
- Social skills
- Contextual skills

Type of good practice:

- Project
- Initiative
- Programme
- Methods
- Training materials
- Other

Target group:

- VET and adult education trainers
- Labour market policy experts
- Human recourse management
- Others: Companies and Organizations

Summary:

Organizations are increasingly aware that only through continuous development and improvement of processes will they be able to compete in changed market conditions (changed global circumstances, emergence of new technologies and materials, changed consumer and user habits, labour shortages...) and successfully integrate into global chains values. The key challenge currently faced by manufacturing companies in particular is the agile management of the aforementioned changed circumstances in the business environment.

Detailed description

The adaptability of the organization, which in some way resembles an autopoietic (self-controlled) organism, is not possible without interconnected and information-supported processes and their control based on objective facts. This is where the digitization and automation of processes prove to be key complements to management decision-making in real time, as irreplaceable support for employees in the effective realization of processes and business ideas, and increasingly even as a feasible answer to the lack of human resources. This is what the Industry 4.0 School is for.

The school, that is, the education, takes place in a hybrid format, which means a combination of online and classroom training as well as individual and interactive work and includes several sets of educational training, over five (5) educational days, with contents such as:

1. Foundations of Industry 4.0. and digital competences
2. Phases of transformation of Industry 4.0.
3. Methods and tools Industry 4.0.
4. Technologies of Industry 4.0. and calculating the cost-effectiveness of investments in digital transformation.
5. Visit the Laboratory for Factories of the Future (LABTOP), which is an educational industrial laboratory for motivation, teaching, applied research and testing. The laboratory presents the most modern technologies, concepts and solutions for smart factories with the integration of the business system as a link in the entire production process. At nine demonstration sites, it provides insight into the business system (ERP), production management system (MES), manipulative and collaborative robots, autonomous vehicle (AGV), augmented reality (AR) and smart sensors (RFID technology).

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The training ends with the creation and presentation of project tasks. By successfully presenting the project task at the end of the program, the participant obtained the title of Digital Transformation Project Manager

Beneficial Results

Participants gain out of the programme a more comprehensive understanding of the concept of Industry 4.0 and Society 5.0, necessary knowledge of approaches and technologies and presentation of examples of good practices, knowledge to identify the existing and desired state of industrialization of the company, guidelines for the preparation of an action plan for the transformation to the level of Industry 4.0 with the support of a mentor, with an emphasis on acquired practical knowledge for independent management of internal projects of digital transformation of production processes.

Organizations thereby gain:

- an understanding of the effects of the transition to the level of Industry 4.0, such as an increase in the organization's supply capacity, vertical integration of processes from sales to delivery, increased resistance to disturbances in the external and internal business environment, control of operations in real time and the possibility of using artificial intelligence in decision making,
- self-assessment of the current level,
- knowledge of business and technological trends in the digitization of business,
- a broader insight into the economic feasibility of investments,
- qualified colleagues who can creatively co-create the transition to the level of Industry 4.0,

qualified colleagues for the internal management of process digitization projects, the use of modern approaches in product planning and production automation.

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