



Deutsche Messe Technology Academy

Industrial knowledge transfer: digital, hybrid, international

Challenges and Idea

Industry 4.0 stands for the digital revolution in industrial production resulting from the comprehensive networking and digitization of all areas of production. This enables companies to make their manufacturing process more efficient and sustainable and, for example, to manufacture individually designed products within the framework and at the cost of automated production. New business models are emerging that are based on the evaluation and use of the masses of data generated. Accordingly, in the manufacturing industry, knowledge about robotics, automation and Industry 4.0 is now among the most necessary knowledge to achieve the following goals:

- Efficient and cost-effective productions also in the small series range
- Energy-efficient production and 100% quality
- New production methods and new products can often only be realized with robotics and automation, e.g. due to increasing miniaturization, wealth of variants, etc.



Deutsche Messe's Smart Factory Academies bring users together with suppliers, trainers, experts, scientists, startups and other users.

The Smart Factory Academies are locations where companies and organizations with production know-how settle. This creates production technology know-how centers that support the manufacturing industries of the individual countries.



Objectives

Our goal is to establish Smart Factory Academies in all European countries and associated countries with manufacturing industries. This could create a Europe-wide competence network that promotes cross-border exchange.

We are currently operating an academy in Hanover / Germany in the EU and are holding concrete talks in Portugal. A preliminary decision has been made by the government in Turkey - as an EU-associated country. In addition, we currently operate five academies and industrial projects outside Europe in China, Morocco and the USA. South Africa and further locations in China and Indonesia are in concrete preparation.



Conferences and Trainings

Thematic focus of our conferences and networking events:

At our events, we focus on the industrial use of automation technology, robots and IIOT.

These techniques are the prerequisite for manufacturing companies to:

- Meet consistent quality standards
- Be or become competitive
- Minimize the consumption of energy and resources

Topics of our conferences (examples):

- Use of industrial robots
- Use of mobile robots
- Use of automation technology in general
- Reliable supply chains
- Blockchain in production
- Protection of productions against cyber attacks
- Current regulations such as the EU Machinery Regulation
- Reduction of energy consumption and CO₂
- Digital transformation

Contents of our trainings (examples):

- Electrical automation (1, 2, 3)
- Control and programming of industrial robots
- Industry 4.0

All our trainings are conducted online and participants have remote access to our hardware. The participants can see via camera whether they have correctly programmed the real production systems or robots.

With the EU...

We would like to work with the EU as our academies could support the EU's industrial policy goals and regional development goals

Promotion of regional clusters

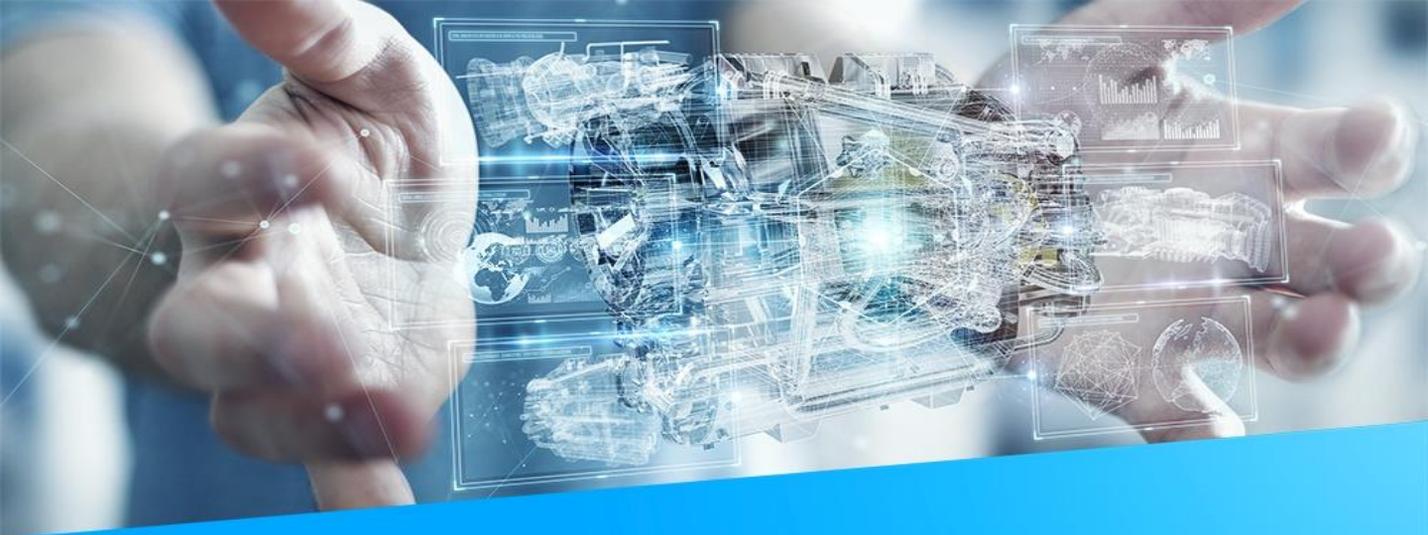
- Our academies are often used by industrial corporates and start-ups as settlement locations
- In our academies there is a constant exchange between providers and users as well as between users and users
- The training courses and seminars develop regional robot and automation knowledge
- Through our network, regional companies exchange information with companies in other countries

Promotion of industrial Startups

- Public funding and private investment companies often focus on supporting service startups or IT startups
- We focus on supporting industrial startups, providing our expensive production technology and building a relationship with other production technology manufacturers. In this way, industrial start-ups can grow quickly and become an important pillar of a regional cluster

Strengthening of domestic industry in neighboring countries of the EU

- Since our production technology can be integrated remotely into online training courses, we can train and qualify industrial workers in neighboring EU countries without great effort.



Network and Activities

In each academy, around 20 to 30 manufacturers of robotics, automation and Industry 4.0 make their products and solutions available as partners of the respective academy.

Around 100 conferences, networking events and seminars are held at each location each year. In total, each academy reaches around 5,000 participants from the local industry.

NETWORK FOR THE TRANSFER OF KNOWLEDGE (1)



OUR INDUSTRIAL NETWORK (1)



Communication

In order to be able to provide participants worldwide with the latest know-how on production technology, the Technology Academy relies on the use of modern communication technology. This includes the global streaming of events, the use of state-of-the-art studio technology and the production of podcasts and videos that can also be used internationally. In this way, we complement the local academies' offerings with digital content that is created at different locations. Innovative concepts and local agility are essential prerequisites for this.

Topics

The Smart Factory Academies focus on providing knowledge and experience around the use of robots, automation and Industry 4.0 in manufacturing industries. The national and international industry partners support the Smart Factory Academies and local companies by providing production know-how and equipment.

Contact

Thomas Rilke
Division Manager Deutsche Messe
thomas.rilke@messe.de

Reinhold Umminger
Director Global Business
reinhold.umminger@messe.de