Automation systems

This course provides an introduction to **automation systems** and their significance in industrial engineering. Key topics include:

- Industry 1.0 bis 5.0

- Examples of use and case studies

- **Components** and basic structure of automated systems, including **fundamental characteristics** ('automation pyramid') and how they interact

Further exercise content:

- **Modelling and simulation** of automation systems

- Systematic **analysis** of automation tasks

- **Design** of automation solutions

- **Machine safety** in automation

- **Programming** and practical applications

- An overview of current applications in **modern industrial automation**