

Advanced Applications of Industry 4.0-Technologies (AA4.0-T)

Teaching aims

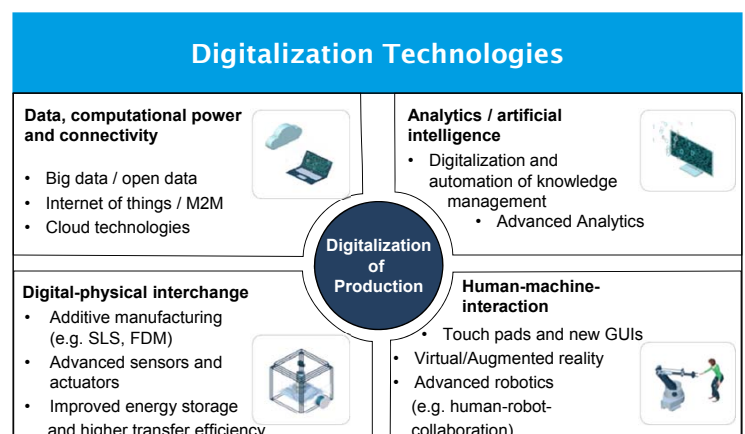
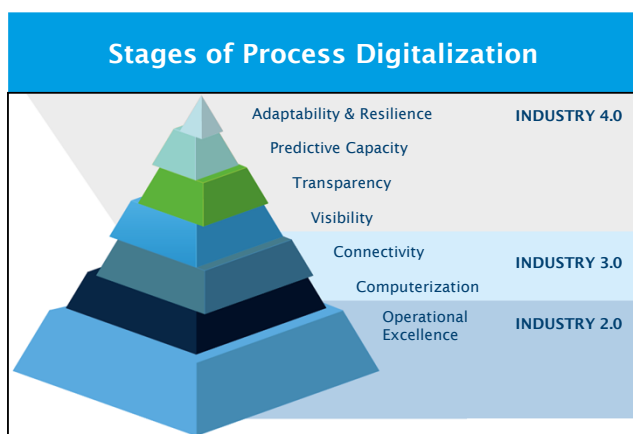
- Introduction to complex application fields of relevant digitalization technologies, trends and emerging business models relevant to production and logistics companies.
- Evaluation of potentials and risks as well as implementation strategies for Industry 4.0-Technologies
- Digital Transformation roadmaps and insights to digitalization stages in various industries

Content of the lecture

The term "Industry 4.0" has its origin in the fourth industrial revolution and the current trend of automation, data interchange and digitalization in the field of industrial production. The term encompasses the use of Cyber-physical systems, the Internet of Things and Cloud Computing. Today, the vision of Industry 4.0 goes beyond production and also incorporates concepts, such as intelligent products, smart mobility solutions, smart logistics and smart buildings. This course introduces students to the more complex application fields of Industry 4.0-Technologies. Following learning outcome will be acquired in this lecture:

- Relevant global trends and increasing complexity challenges of production companies
- Importance and identification of emerging digitalization trends for industrial production's efficiency in the own company as well as throughout the value creation networks
- Identification of application fields, evaluation of potentials and risks as well as implementation strategies of Industry 4.0-Technologies
- Phases and management of digitalization projects
- Application of frameworks and tools for the analysis, development and optimization of existing business models.

Tools | Use cases



Organizational

Structure: 2 semester hours lecture, 1 semester hour exercise / english
Examination: Group case studies: written assignment and presentation, exercises

Contact:

