

# PRODUCT DESIGN AND DIGITAL DEVELOPMENT

## Digital Automation Engineering

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*[Link to personal page](#)*

# Course structure

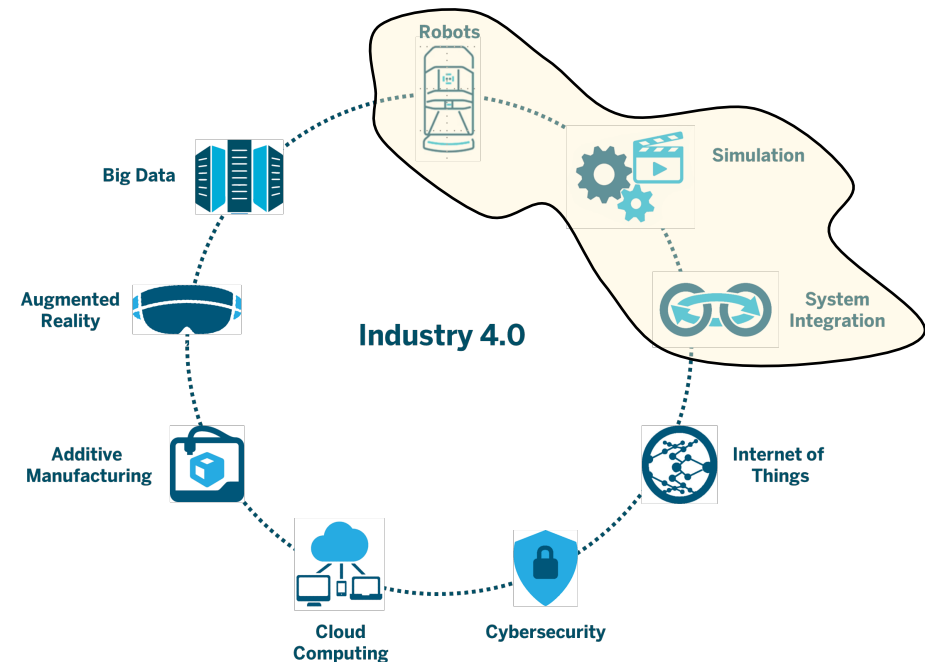
- 6CFU → 3CFU *Theory* + 3CFU *Lab*
- *Learning by doing approach*

## Theoretical modules

1. Methods and tools to support the design and development of industrial products and automation systems
2. Conceptual design and embodiment design
3. Geometry representation
4. Virtual Prototyping techniques
5. Information management in the product life cycle



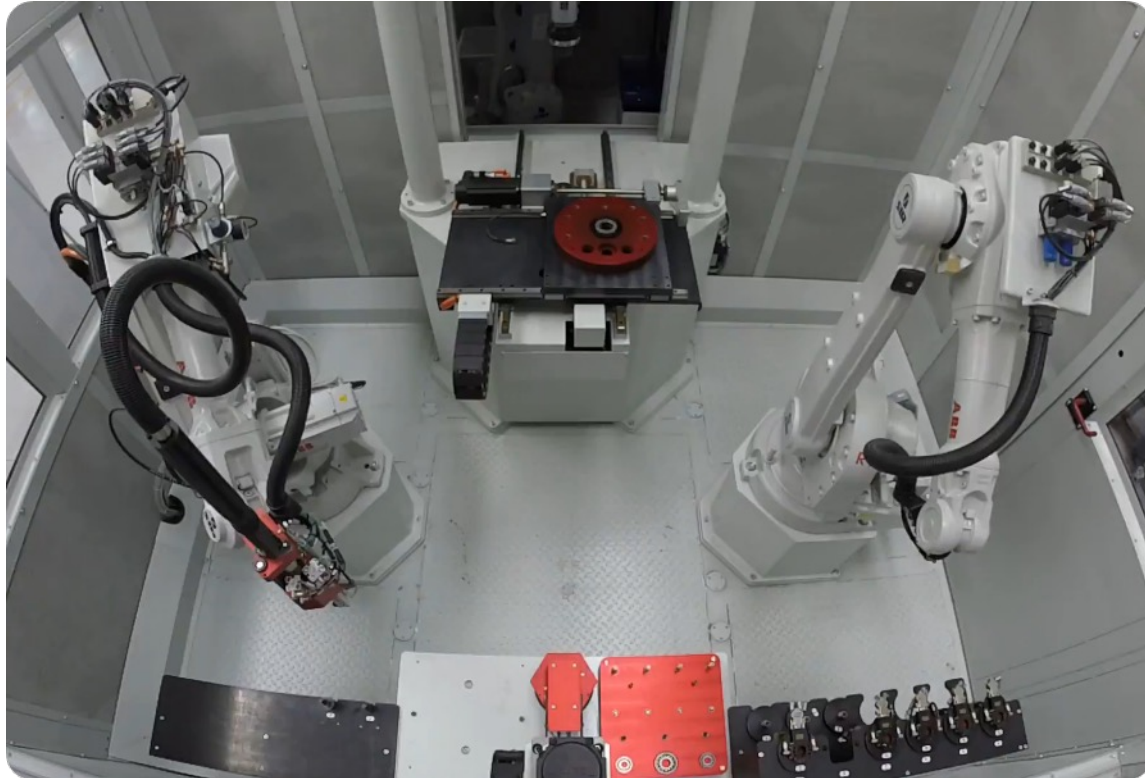
## Lab Exercises → hands-on experience on industrial case study



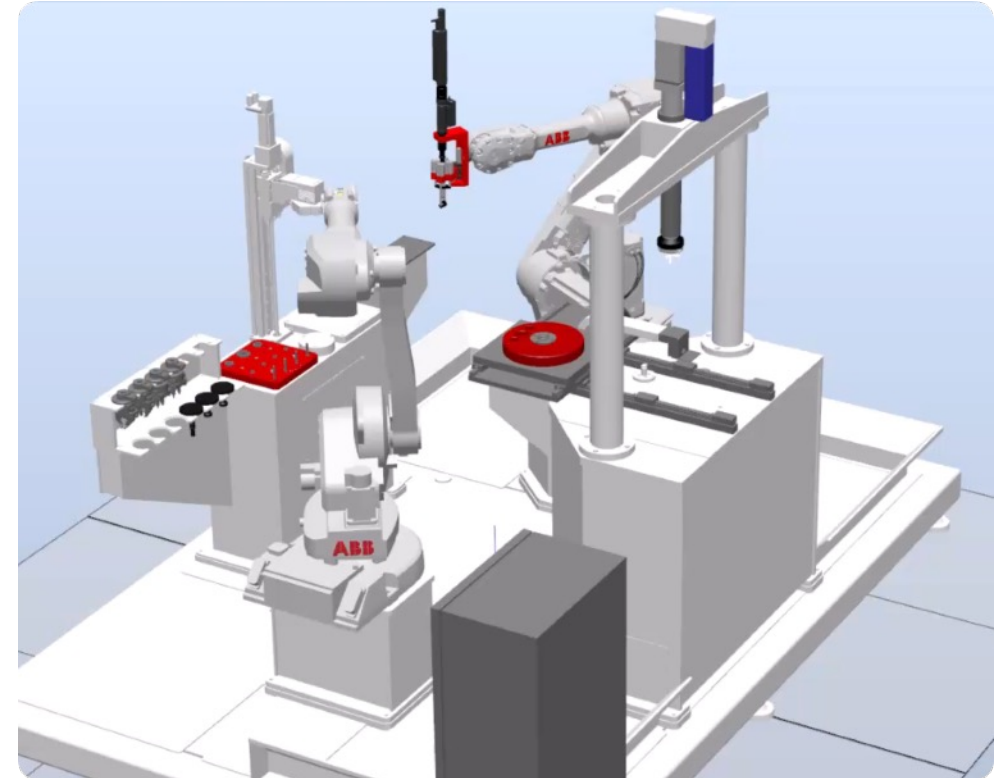


# Example of automated cell (video)

*Physical prototype*

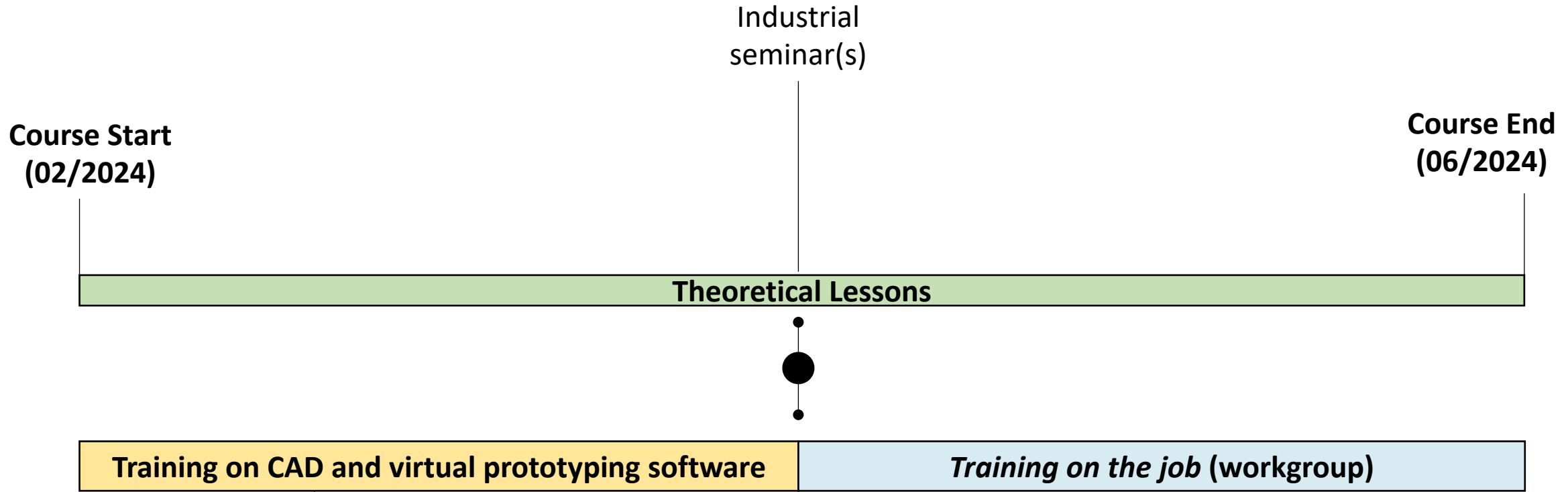


*Virtual prototype*

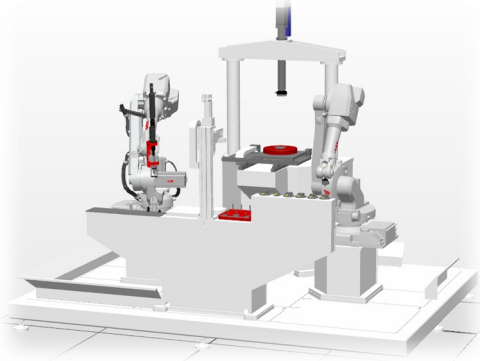


Extended simulation visible at this [link](#)

# Timeline



Seminar for case study assignment



# Verification of learning

**Step 1**: Submit files and **technical report**

**Step 2**: Oral Exam

- **Presentation of group project (2-3 people) + discussion** **50% of final score**
- **2-3 questions related to theoretical topics** **50% of final score**