

Designing Technology – Session I Kick-Off

20 October 2025

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Teaching and Supervision Team





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Agenda



- **Course Organisation**
- **Working Mode during the Course**
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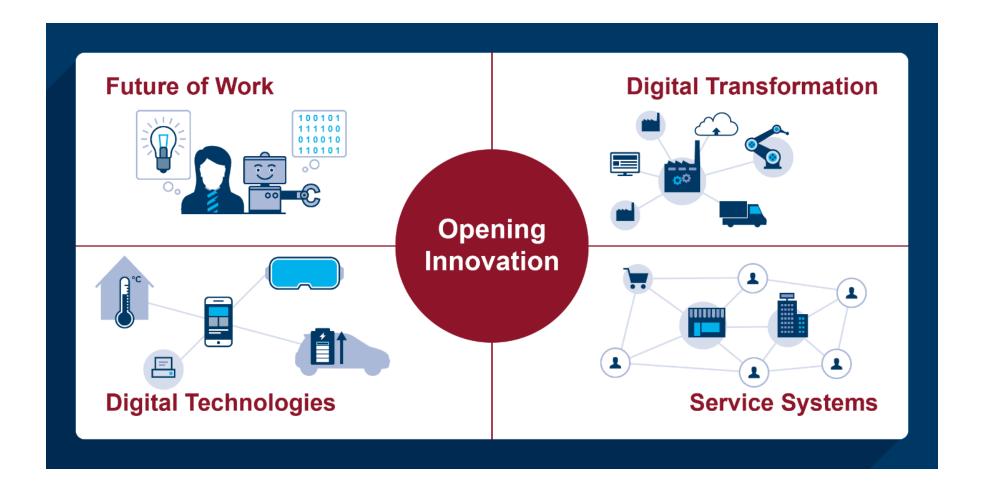


Our research focus at Wi1

Topics and perspectives







Wi1 Team

Who are the people of Wi1



Wi1 Team



Prof. Dr. Kathrin M. Möslein Chair



Prof. Dr. Angela Roth Co-Chair



Monika Hanisch Office Management / General Questions



Dr. Natalie Breutner Research associates



Dr. Sascha Julian Oks Research associates



Layla Hajjam-Demir Research associates



Tizian Kernstock Research associates



Spyridon Georg Koustas Research associates





Nina Lugmair Research associates



Joni Riihimäki Research associates



Timon Sengewald



Eike Trost Strategische Partnerschaften



Janik Wadlinger Strategische Partnerschaften



Research associates

Matthäus Wilga Research associates



Timucin Yapar Research associates



Larisa Zaburdaeva **FAUconnect, Central Research** Institutions, Emerging Fields Initiative (EFI)



Research Projects at Wi1

What we work on















































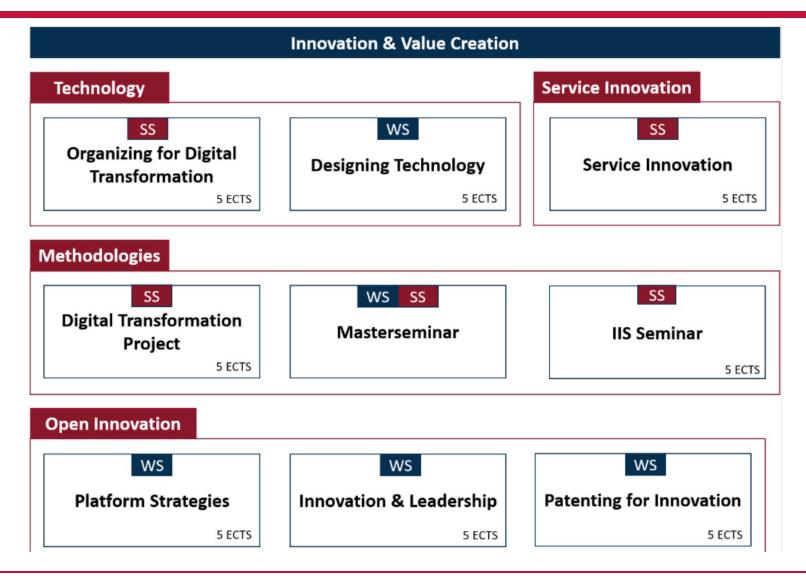




Courses at the Chair







Topics of our Lectures

Designing Technology





- Systems Thinking
- Cybernetics
- Resource Analytics
- Dynamic Capabilities

- Design Thinking
- Heuristic Search
- Evolutionary Models
- Project Management





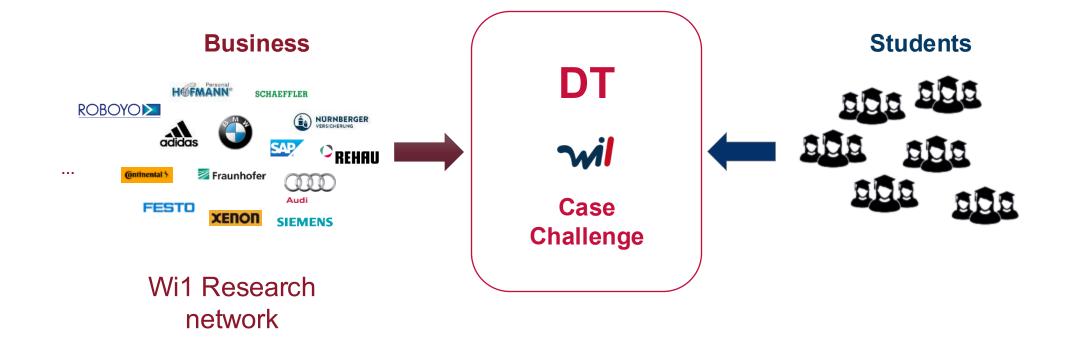
Course Outline



Course Format

Designing Technology





General Concept

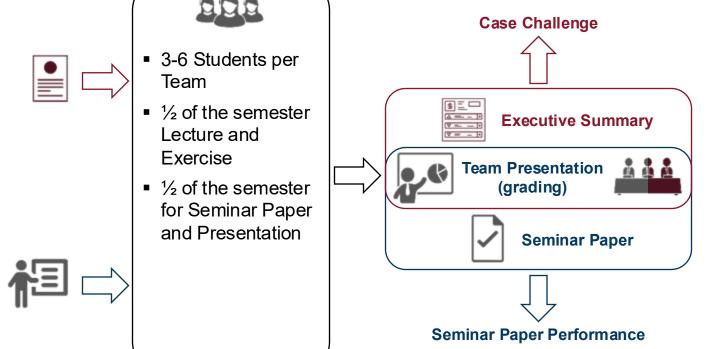
How it works





- Challenge Description
- Regular Meetings

- Input from lecture
- Practice in exercises
- Regular Meetings



The Syllabus

All you need to know about the course







Course Schedule

Sessions and exam deadlines

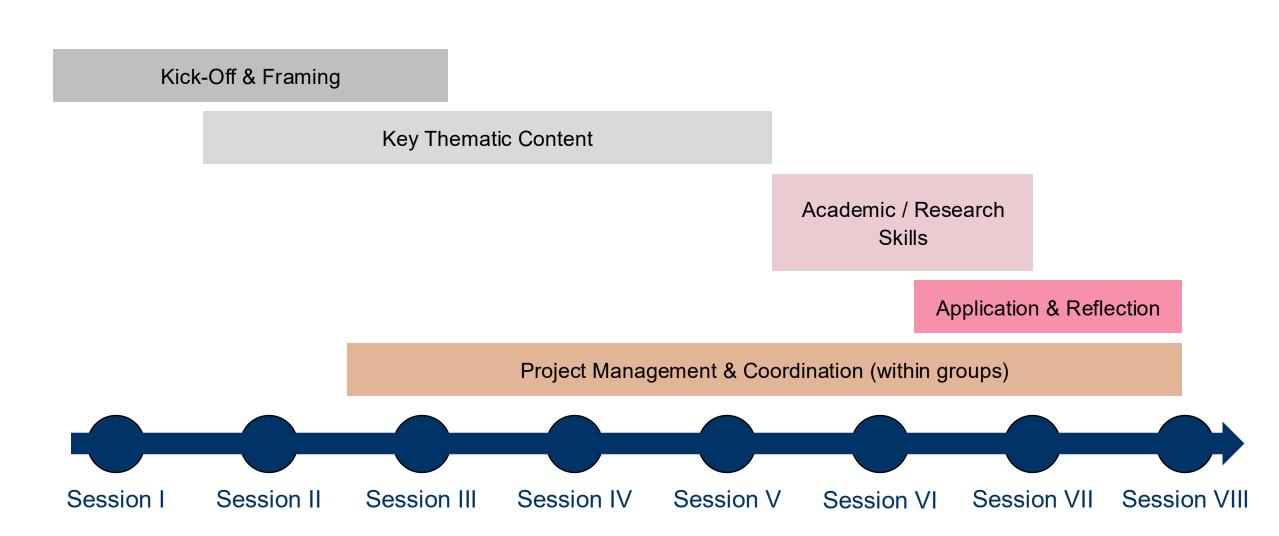


Session	Date	Time
Session I Course Kick-Off & Case Introduction	20.10.25	13:15 – 14:30
Session II Innovation, Digital Transformation & Resilience	27.10.25	13:15 - 14:45 15:00 - 16:30
Session III Problem Framing & Research Project Management	05.11.25	11:30 – 13:00
Session IV Theoretical & Technological Foundations	10.11.25	13:15 - 14:45 15:00 - 16:30
Session V Governance, Trust & Risk in Innovation Networks	17.11.25	13:15 - 14:45 15:00 - 16:30
Session VI Writing & Presenting Research Projects	26.11.25	11:30 – 13:00
Session VII Mid-Term-Presentation	08.12.25	10:00 — 13:00
Session VIII Final Presentation of Research Project	11.02.26	12:00 – 15:00
Hand-In for Written Assignment	27.02.26	23:55



This Course has a Lecture-guided Format with a Project-based Application of Learnings





Grading and Examination

Designing Technology



The course grade will be determined based on the	
following mode of evaluation:	

Examination:

- Research Project (50%) (partly team work) (70742)
- Written Assignment (50%) (partly team work) (70741)

Scope

Designing Technology



These measures are independent of the group size.

Scope of the paper

- The length of the paper should be between 20-30 pages, which is measured by word count. This corresponds to 6,500-10,000 words.
- Templates are on the website
- In addition, we have a whole "how to write seminar papers" session

Scope of the presentation

- The duration of the presentation should be within 30 min +/- 3 min. We suggest around 15 min presentation of the business case and 15 min demonstration (Mock-Up)
- The presenters should have more or less equal length of speaking time
- In the last session we focus on <u>presentation skills</u> and "<u>how to present in business</u>"

Plagiarism is a serious offence!

Designing Technology



What is plagiarism?

Plagiarism is the unauthorized use or close imitation of the language and thoughts of another author and the representation thereof as one's own original work

There is a zero tolerance policy for plagiarism!

- Each assignment will be checked for plagiarism using a variety of methods
- Any case of plagiarism will be reported to the board of examiners

Consequences of plagiarism

- The final grade will be a 5.0
- The paper containing suspected plagiarism will be forwarded to the board of examiners, who will decide about further consequences. Plagiarism is a serious offence that can lead to severe consequences like a removal from the register of students



Detailed Course Schedule

Registration to the course



Link for the final registration until
 24th October, 13:15 PM

https://terminplaner6.dfn.de/b/ac0ef05ded705b37c3a3059 a7eca9d03-1435067

- Students organise themselves in teams by registering for the groups on StudOn (3-6 students per group) after session 2
- We have 2 teams for each of the 3 use cases. Choice is up to you and follows a first-come, first-served manner.
- Please ensure that each team has a diverse background. e.g., focus on business, IT, informatics, PM





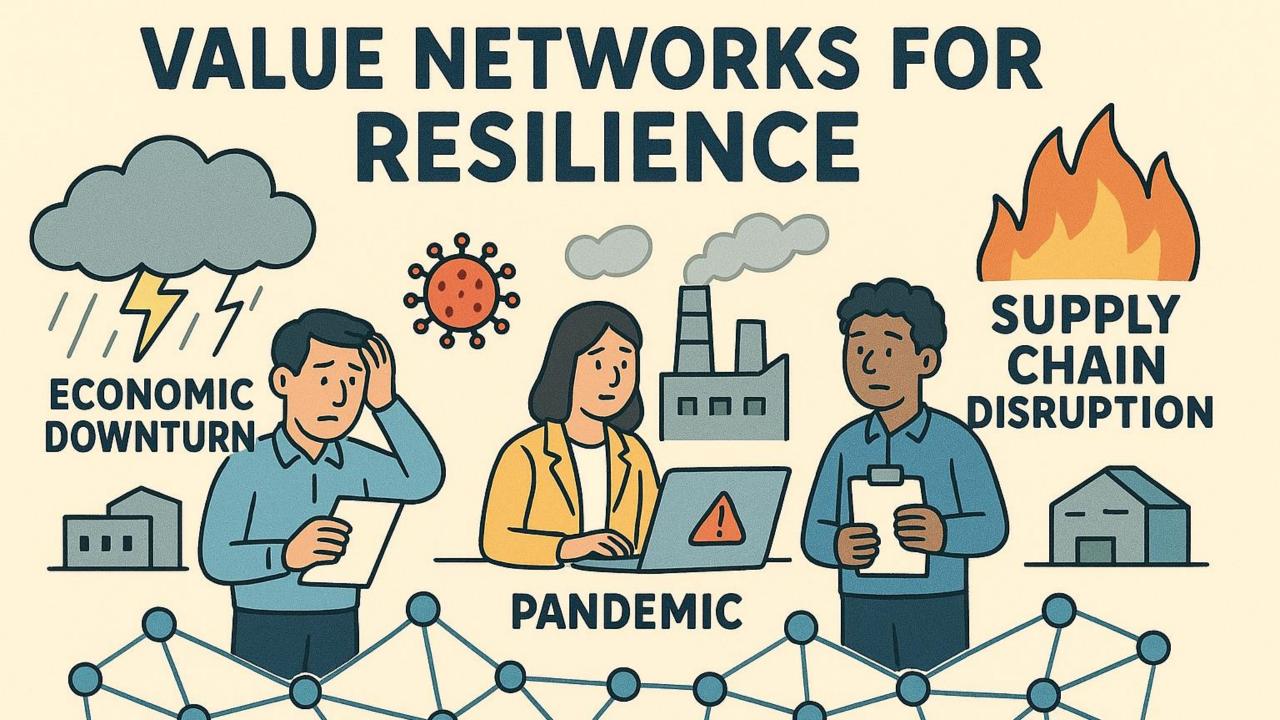
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Project Resikomp



Strengthening the resilience of value creation networks through competence pooling

ResiKomp is a project that aims to strengthen the resilience of value networks in sectors like automotive and IT by enabling rapid access to critical skills during crises. Using digital competence pools, companies can identify key expertise, simulate disruptions with AI, and share resources across networks, fostering collaboration, trust, and effective crisis response.





















What is Co-creation?

What chatbots have to say



ChatGPT

Co-creation is a **collaborative process** where multiple stakeholders—like customers, employees, citizens, or partners actively contribute to the design, development, or improvement of products, services, or solutions. Instead of being passive recipients, they become **creative** participants.

Perplexity.ai

Co-creation is a **collaborative process** in which **multiple stakeholders**—such as companies, customers, employees, partners, or even citizens—work together to develop new products, services, solutions, or ideas. The core principle is that value is generated not just by the organization alone, but through the active involvement and input of external participants throughout the entire development process

Consensus

Co-creation is a **collaborative process** where **multiple stakeholders**, such as customers, employees, or community members, actively participate in creating or improving products, services, or experiences. This approach leverages the collective expertise and insights of these parties to enhance outcomes across various fields, including marketing, public health, and education.



What is Resilience?

What chatbots have to say



ChatGPT

Resilience is the ability to adapt, recover, and grow stronger in the face of challenges, setbacks, or change. It involves maintaining a positive mindset, emotional stability, and problem-solving capacity under stress, allowing individuals or systems to bounce back from difficulties while learning and improving from the experience.

Perplexity.ai

Resilience is the **ability to adapt and recover** from adversity, stress, trauma, or challenging situations in a timely and effective manner. It involves maintaining or quickly regaining one's physical, mental, and emotional stability despite difficulties. Resilience is not about avoiding pain or stress but about **facing hardships** with flexibility, strength, and a positive outlook, often **becoming stronger** and more resourceful through the experience. It includes **coping strategies**, social support, and a constructive perception of stress, allowing individuals or systems to bounce back while preserving core functions and growth.

Consensus

Resilience involves the **capacity to withstand**, **recover**, **and grow** from challenges, rather than simply returning to a previous state. It is **not a fixed trait** but a multifaceted, evolving process **shaped by interactions** between individuals and their environments, encompassing biological, psychological, social, and systemic factors. Definitions emphasize positive adaptation in the face of adversity, the ability to "bounce back," and, in some contexts, transformation or growth following hardship.



There are 2 Teams for each of the 3 Use-Cases



Overview of use cases

1 Simulation & Risk Awareness

Shared Knowledge & Resource Platforms

3 Human-Centred Collaboration

Case 1A

Digital Crisis Simulation Tool

Case 1B

Governance of Crisis Simulations



Case 2A

Design of a Collaborative Information Hub

Case 2B

Incentives for Sharing Information
Across Companies



Case 3A

Al-based Support for Crisis
Knowledge Transfer

Case 3B

Organizational Training & Crisis
Preparedness





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Thank you for your attention!



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