

# Short Courses Program Structure

What makes Short Courses at RWTH special

Experiencing international teaching, a career boost and fun at the same time!



## Academic Content

Lectures

Exercises

Hands-on Case Studies

Learning Platform



## Supporting Program

Institute/Company Visit(s)

Excursions

Lab Tours

Expert Talks



## Intercultural Experience

(Virtual) Social Events

City Trips / Exploring Aachen

Mentor Program

Career Center



# "Agile Innovation" Online Winter Course



## Academic Content

Product Ergonomics

Design Methodology

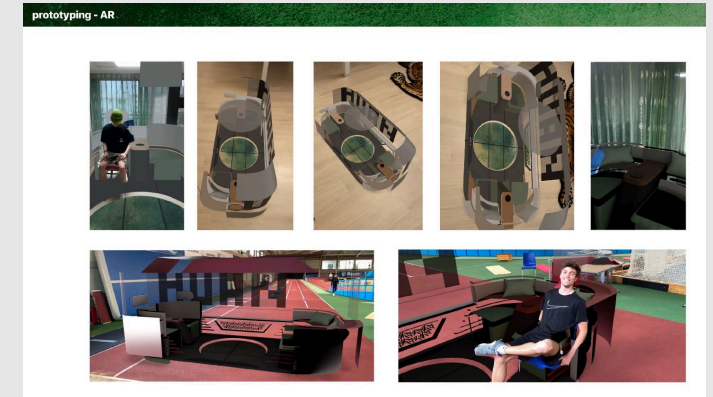
Sustainable Product Planning

User Centric Value

Agile Product Design

### In this Online Course students

- gain insights into cutting-edge methods and processes of agile product innovation
- make use of virtual product design tools like CAD and implement rapid prototyping strategies
- analyze and improve existing real-life products
- learn about market research & product life-cycles



# Tentative weekly schedule

## Online Course "Agile Innovation"

Week 1 - Japanese time zone (UTC +9)

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
TIME	Feb 27	Feb 28	March 01	March 02	March 03	March 04	March 05	
9:30-10:00		L00 - Strategies in Sustainable Product Planning and Requirements Engineering  E00 - Self Introduction	L01 - Product disassembly and structural analysis	L03 - Function based design	L05 - Product architecture	L07 - Generation of solution principles	Free time for self-study	
10:00-10:30								
10:30-11:00								
11:00-11:30			L02 - Product ergonomics and behavior	L04 - Functional analysis	L06 - Synthesis of solution principles	L08 - Intro to sustainable design		
11:30-12:00								
12:00-12:30								
12:30-13:00								
13:00-13:30								
13:30-14:00								
14:00-14:30								
14:30-15:00								
15:00-15:30								
15:30-16:00								
16:00-16:30								
16:30-17:00								
17:00-17:30			Welcome Orientation	E01 - Product ergonomics and behavior / Product detachment	E02 - Requirement Analysis	E03 - Function based design	E05 - Product architecture	Escape Room
17:30-18:00								
18:00-18:30			Break		Break			
18:30-19:00			Digital City Tour of Aachen		Intercultural meet-up	E04 - Functional analysis	E06 - Solution principle	
19:00-19:30								
19:30-20:00								
20:00-20:30								
20:30-21:00								

### legend:

#### live events

- live lectures via Zoom
- live conduction of experiments
- live organizational and social events via Zoom

#### asynchronous learning

- pre-recorded lectures: to be prepared before respective live lectures
- self-study according to individual needs



**Prof. Dr. Manuel Löwer & Dr. Tim Katzwinkel**

Institute for Machine Elements and Systems Engineering

Research areas:  
Product Innovation, Product Quality, Machine Design



# Tentative weekly schedule

## Online Course "Agile Innovation"

Week 2 - Japanese time zone (UTC +9)

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
TIME	March 06	March 07	March 08	March 09	March 10	March 11	March 12	
9:30-10:00	Free time for self-study	L09 - Agile Methods	Agile Development Sprint Creating User Value I	Agile Development Sprint Creating User Value II				
10:00-10:30								
10:30-11:00								
11:00-11:30								
11:30-12:00								
12:00-12:30								
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14:30-15:00								
15:00-15:30								
15:30-16:00								
16:00-16:30								
16:30-17:00								
17:00-17:30			E07 - Product innovation	Sprint Planning Moderation Team Communication Review Planning	Sprint Planning	Final Sprint		Study at RWTH Info-Event
17:30-18:00								Break
18:00-18:30		E08 - CAD introduction	Sprint 2		Results presentation			Farewell Event
18:30-19:00								
19:00-19:30			Sprint Review					
19:30-20:00								
20:00-20:30								
20:30-21:00								

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