# **Online Courses at RWTH Aachen University**

Spend your time effectively from home and boost your career

Experience excellent academic content and have fun at the same time!

Our Online Courses are highly interactive and contain a lot of intensive teamwork. As a participant you develop practical ideas together with renowned professors, get to know future workplaces in Germany and expand your skills with hands-on case studies.

## **Highlights & Benefits**

To support the academic content of each program, we include expert talks, institute visits, lab tours, and the chance to network with German companies and organizations.



Find all Short Courses on our <u>website</u>

### **Excellent Academic Teaching**

RWTH Aachen University is top-ranked and one of Europe's leading science and research institutions. You benefit from high-value academic content and excellent lectures online.

### Synchronous learning

- ▶ live sessions & exercises
- ▶ Q&As
- discussions & debates
- ▶ interactive participation

direct support by our lecturers

### Asynchronous learning

- video lectures
- ▶ readings with quizzes
- ▶ home- & group work
- exercises & simulations

freely accessible | self-determined

## **Supporting Program & Intercultural Experience**

Our attractive supporting program provides an insight into the history and culture of Germany. We've come up with creative ways to include various social activities in our Online Courses:

- digital sightseeing tour
- ▶ intercultural meet-ups, get-togethers with mentors & professors
- cultural events: cathedral & museum tours
- ▶ team-building: icebreaking games, escape room, photo challenges
- ▶ sports: stretching exercises / evening yoga
- ▶ honoring events: welcome and certificate ceremony







Application Information

You are welcome to apply if you:

- are at least 18 years old
- pursue your higher education
- ▶ completed your 1st/2nd year of studies
- study a degree related to our program
- are proficient in the English language

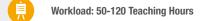
course-specific requirements on program pages

### **Quickfacts about our Courses**









Credit Points: 2-4 ECTS

Qualification: RWTH Certificate

Language: English



Contact:
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Team Leader Short Courses
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RWTH International Academy gGmbH

















# Sustainable Supply Chain Management in Industry 4.0

### **Expect these Contents**

You study various supply chain concepts and need to overcome current challenges in a business simulation game. By making practical choices for your company and reflecting on them on a theoretical level, you learn and experience first-hand how effective and sustainable supply chain management works.

You consider sustainability and climate risk management and learn about Industry 4.0 in a real production environment. Understand the technologies' impact on the supply chain and integrate a responsible and modern way of thinking.



# **Interactive Teaching**

- ► Work 4.0: profiles and roles
- Circular business model design
- Human-machine interaction
- Demands, laws and efficiency
- Application workshop with Al

## Master the circular economy in a business simulation game

- Experience the production chain with real-life machines
- Learn how Artificial Intelligence and Big Data can protect resources and still assure high quality in production
- Apply sustainable strategies to develop a circular business model with your team members
- Understand supply chain law challenges and digital responses



Especially tailored to unite different time zones: You have two hours of live lectures and group work per day and can flexibly work through pre-recorded materials.

### **Time Frame and Credits**

- Online Course: February 07 25, 2022
- Effort: 50 60 hours total, 2 hours daily
- **Credit Points: 2 ECTS**
- Course fees: 1,194 €

### **Your Academic Staff**

This program is conducted by the ITA Academy from the Institute of Textile Technology. In their model factory for digitalisation in production, they demonstrate supply chain management and Industry 4.0 technologies. An author, lecturer and developer of business simulation games provides content on sustainability aspects and circular economy.





Photos: RWTH International Academy, ITA Academy GmbH, Martin Braun

















# **Agile Innovation**

### **Expect these Contents**

Advancing globalization in an increasingly digital world is posing new challenges for engineers and products likewise. In addition to shortening market cycles and scheduled development times, today there are also increasing factors of volatility, uncertainty, complexity and ambiguity.

As a result, product developers are forced to react flexibly to any changes. This course therefore teaches the approach of agile product development. This concept combines the basics of design theory and development methodology with modern agile development methods.



# **Interactive Teaching**

- Product ergonomics and behavior
- Design methodology
- Sustainable product planning
- User centric value
- Agile product design



### Design, develop and prototype a user-centered product with your team

- Learn from a real-life product example
- Use virtual product development tools
- Apply rapid prototyping strategies to interactively develop customer-oriented solutions in short development sprints
- Work together and present your team's final concept



Especially tailored to students from our Japanese partner universities, but open for all students from the Asian area (similar time zones).

### **Time Frame and Credits**

- Online Course: February 28 March 11
- Full-time: 50 60 hours
- **Credit Points: 2 ECTS**
- Course fees: 1,194 €



# **Your Academic Staff** Prof. Dr.-Ing. Manuel Löwer

This program is an exclusive cooperation with University of Wuppertal (BUW) and their experts on Agile Innovation.

The research group "Product Safety and Quality Engineering" focuses on the guarantee of safety and quality across all processes of the product life cycle.

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