

SUMMER SCHOOLS PROGRAM

RUB

AKADEMIE ■ ■ ■ ■
DER RUHR-UNIVERSITÄT



Programs offered

- Hydrogen Energy Technologies
- Smart & Sustainable Energy Systems
- Smart & Sustainable Buildings

What is a Summer School program at the RUB?

Considering studying in Germany? Our Summer School offers an ideal chance to immerse yourself in the language, explore German culture, and delve into renowned German engineering and Smart Production Systems. Experience live lectures and seminars with top engineers at Ruhr University, blending engineering training, tasks, and cultural insights. Overcome the language challenge with basic German lessons, ensuring you can confidently order our famous beer before you leave. Join us for a unique educational and cultural experience!



2 week Programs between
July 14 and August 8, 2025

01/07

<https://international-academy.rub.de/>



Your Benefits

- In-depth expertise in cutting-edge Engineering topics: Smart Production Systems and Smart Energy Systems and Buildings
- Networking opportunities with the rising talents in the field
- Acquisition of basic German language skills
- Intercultural training for enhanced global collaboration
- Direct interaction with renowned professors leading advancements in the respective domains
- Comprehensive introduction to the German University system
- Earn academic credits for your practical experience

Quick Facts

- **Duration:** 2 weeks
- **Date:** July 14- July 25, 2025
July 28- August 8, 2025
- **Language:** English
- **Registration Deadline:** June 1st
- **Discount:** Early-Bird discount until May 1
- **Fee:** 790€ Course fee
690€ Accommodation & meals
- **Credit:** 3 EC

**Full details can be found on our website

Target Group



- At least 18 years of age
- Proficient in the English Language
- Currently in your Bachelor's, Masters's, in between or recently graduated

2-Week Sample Schedule

Week 1

Monday	Tuesday	Wednesday	Thursday	Friday
8am – 9:15am: Breakfast and travel to day location				
9:30am-12:30pm Welcome Session <i>RUB Tour</i>	9:30am-12:30pm Lecture <i>Intro. To German Engineering</i>	9:30am-12:30pm Lecture <i>Lean Management</i>	9:30am-12:30pm Lecture <i>Industry 4.0</i>	9:30am-12:30pm Lecture <i>Ruhr Area and Industrial Change</i>
12:30pm- 1:30 pm: Lunch Break				
1:30pm-4:30pm Language & Culture <i>German Language</i>	1:30pm-4:30pm Practical/Activity <i>Engineering & Digital Transformation</i>	1:30pm-4:30pm Practical/Activity <i>Learning Factory (Sustainable workflow & production)</i>	1:30pm-4:30pm Practical/Activity <i>Smart Production System in action</i>	1:30pm-4:30pm Language & Culture <i>First Interactions</i>
		Evening Activity <i>BBQ</i>		

Week 2

Monday	Tuesday	Wednesday	Thursday	Friday
8am – 9:15am: Breakfast and travel to day location				
9:30am-12:30pm Lecture <i>Role-Model Q&A: RUB German Engineering Students</i>	9:30am-12:30pm Lecture <i>Intro. To Electro mobility</i>	9:30am-12:30pm Excursion <i>Day in the life of a German</i>	9:30am-12:30pm Practical/ Activity <i>Design Thinking</i>	9:30am-12:30pm Lecture <i>Product Service Systems</i>
12:30pm- 1:30 pm: Lunch Break				
1:30pm-4:30pm Practical/ Activity <i>RUB Faculty for Electrical Engineering</i>	1:30pm-4:30pm Practical/Activity <i>Electro mobility: Solar Car</i>	1:30pm-4:30pm Language & Culture <i>Work and office in Germany</i>	1:30pm-4:30pm Practical/Activity <i>Rapid Prototyping</i>	1:30pm-4:30pm Language & Culture <i>German Language</i>
		Evening Activity <i>Traditional German Dinner</i>		

**Please note that this is a sample schedule and full details are subject to change

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Smart & Sustainable Energy Systems

With the rise of global challenges like climate change, dwindling resources, and a surging need for energy, the call to shift towards smarter and more sustainable energy systems has never been more crucial. Traditional energy sources, known for their environmental impact and limited availability, are slowly giving way to innovative solutions that prioritize efficiency, smart technology, and environmental responsibility.

This course will enable you to gain insight into a variety of topics related to energy management as well as smart energy systems and the advanced technologies needed to implement them.



Key Topics

- Effective energy systems used within the Ruhr area
- Energy industry and power distribution
- Power plant engineering
- Sustainable energy economy
- Excursion to a Hydro Economy facility
- Energy conversion- renewable energies
- Grid of the future

Summer 2025 Facts



July 14 until July 25, 2025

- Excursions are included in course fee
- Evenings and weekends are free for exploration
- Visit our website for more details



Hydrogen Energy Technologies

Smart and sustainable energy systems revolutionize power dynamics by integrating advanced technologies like IoT and AI. These systems optimize efficiency and minimize environmental impact through intelligent grid management and the incorporation of renewable sources. By combining solar and wind energy with cutting-edge solutions, they prioritize reliability and eco-friendliness. This approach aims to reduce carbon emissions, promote energy conservation, and create resilient infrastructures. Embracing innovation, smart and sustainable energy systems are at the forefront of the fight against climate change, paving the way for a greener and more intelligent energy landscape.

Key Topics

- Introduction to hydrogen energy technologies
- Hydrogen in industrial applications
- Hydrogen in transport sectors
- Hydrogen production and manufacturing processes
- Hydrogen storage technologies
- Applications of fuel cells in mobility
- Excursion to local hydrogen companies in NRW

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Smart & Sustainable Buildings

Smart and sustainable buildings epitomize an innovative construction paradigm, seamlessly blending technology and eco-conscious design. Integrating smart sensors, automation, and data analytics optimizes energy efficiency and indoor climate control. These structures prioritize environmental responsibility by incorporating eco-friendly materials and renewable energy sources, leading to reduced operational costs. With a focus on occupant well-being, smart and sustainable buildings redefine living and working spaces, creating healthier environments. This transformative approach sets new standards for construction, aligning technological advancements with a commitment to ecological sustainability in urban development.



Key Topics

- Introduction to BIM
- Intro. to Sustainability consulting
- Excursion to sustainable building site
- Smart Design with parametric Modeling and Simulation
- Computational Mechanics of Buildings
- Energy Consulting and Building energy certificates in Europe
- Renewable Energies and Efficiency Technologies

Summer 2025 Facts



July 28 until August 8, 2025

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**Come and join us
for some summer
fun in Bochum,
Germany!**

Contact Us

For more details and questions,
please contact:



isp@akademie.rub.de



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