

GERMAN ENGINEERING AND CULTURE



German Engineering and Culture

Online Course

Distance-learning is an excellent option to realize our Short Courses - without any boundaries! Get the full digital experience with online learning platforms, interactive lectures & tutorials, case studies for group work & self-study, virtual events and meetings.



Program Objective and Content

The Online Course provides students with an introduction to German engineering and natural sciences as well as German culture. Topics include fundamentals of biology, chemistry and physics, but also contemporary issues regarding sustainable mobility concepts, Industry 4.0 and bioprocess technology.



Hands-on classes

Students will conduct their own experiments and little research projects with everyday objects at home and bring together their results for the purpose of comparing, combining and to find connections.



Get together with your Summer Mentor

In order for students to get to know Germany, the RWTH University and the city of Aachen, we offer a mentoring program. All participants will have online encounters with German students to exchange ideas and experiences with their studies, learn about student life in Aachen and German traditions. Some of the students from RWTH even go to Japan for a longer exchange afterwards. Who knows, maybe this results in a long-lasting friendship!



Academic Staff

The teaching is divided into a natural sciences part and an engineering part. Numerous institutes are responsible for the academic program, allowing students to explore each of these fields of study.



Quickfacts






- ▶ Study Format: Online Course
- ▶ Language: English
- ▶ Course Fees: EUR 2.000
- ▶ Duration: 2 weeks | 23rd August - 3rd September 2021
- ▶ Workload: 60 Teaching Units // ~ 2 ECTS
- ▶ Qualification: Certificate from RWTH Aachen University

Get the
full online
experience!

*All Short Courses are co-funded by the RWTH International Academy in cooperation with RWTH Aachen University.

Academic Content

German Engineering and Culture - Online Course

Lectures and Exercises		Teaching Units
	Natural Sciences - Fundamentals of Physics	8
	Natural Sciences - Fundamentals of Biology	4
	Natural Sciences - Fundamentals of Chemistry	4
	Sustainable Mobility Concepts - Combustion Technology for Sustainable Energy Concepts	4
	Sustainable Mobility Concepts - Lightweight Design	4
	Industry 4.0 - Introduction "Internet of Production"	4
	Industry 4.0 - Communication in Production and IIoT	4
	Industry 4.0 - From IoT to Big Data – Modern Information Integration	4
	Bioprocess Technology - Biochemical Engineering, Biocatalysts and Microorganisms	8
	Bioprocess Technology - Applied Microbiology – From Fundamentals to Applications	4
German Culture and Social Events		Teaching Units
	Social Events with Mentors	6
	Intercultural Evening, Sightseeing Tour Aachen	4
	Info Event with RWTH Aachen University	2
Total Teaching Units		60

Self-Study and Exercises



Applicant's Profile

This program is specifically tailored for B.Sc./B.E. students enrolled at Japanese Universities. Applicants need proficient knowledge of the English language and should be studying engineering, natural sciences or a related field. The minimum age to participate is 18 years.



Application Information

We will evaluate the applications based on the cover letter, the completion of the special requirements of each program, the overall strength of your academic record, and extracurricular experiences.



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