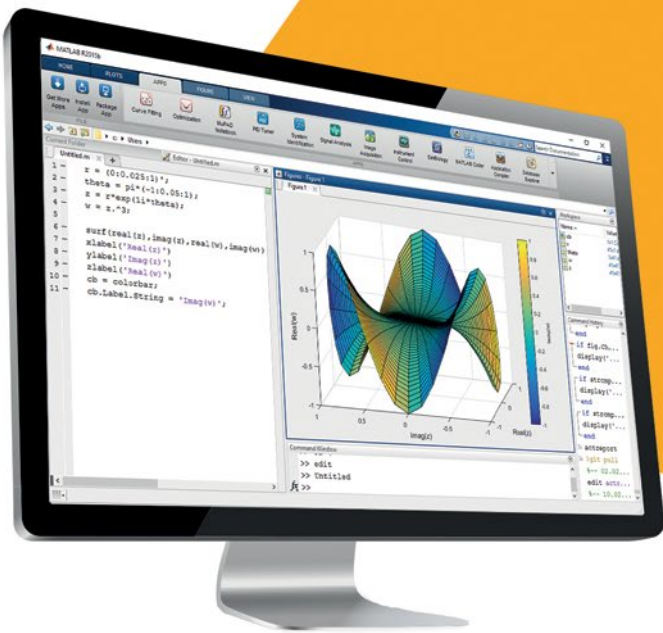


# AUTOMATION AND SIMULATION



## Automation and Simulation Engineering Summer School

Our Summer School courses in Mechanical Engineering and Management offer international students the opportunity to take part in excellent science and research at RWTH Aachen University. The University is highly acclaimed internationally for its development of innovative answers to the most pressing global challenges. As a result, numerous research institutions, companies, R&D departments and start-ups have settled in and around Aachen, making RWTH the ideal setting for aspiring students.



### Program Objective

The Summer School covers the fundamentals used in automation and simulation. In hands-on exercises and computer lab lectures, students solve real world problems using industry standard and open source software. As a result, methods used in mechanical engineering are tried, tested and acquired. In addition, students learn about German language and culture in the language classes.



### Academic Staff

The teaching is divided into an engineering part and a German language part. The Institute of General Mechanics (IAM) and a visiting scholar and longstanding friend of the IAM are responsible for the automation and simulation classes. The Language Center of RWTH Aachen University is conducting the language classes.



### Applicant's Profile

This program is specifically tailored for B.Sc./B.E. students enrolled at top universities. Applicants need proficient knowledge of the English language and should be studying Mechanical Engineering or a related field. Completion of the first academic year is mandatory. The minimum age to participate is 18 years.



### Quickfacts

<b>Study format</b>	Summer School
<b>Qualification</b>	Certificate
<b>Language</b>	English
<b>Course Fees</b>	EUR 3,750
<b>Duration</b>	4 weeks
<b>Workload</b>	120 Teaching Units



### 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.

\*All Summer Schools are co-funded by the RWTH International Academy in cooperation with RWTH Aachen University.



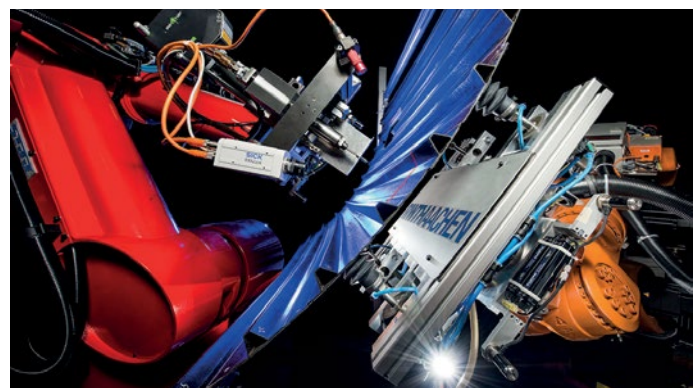
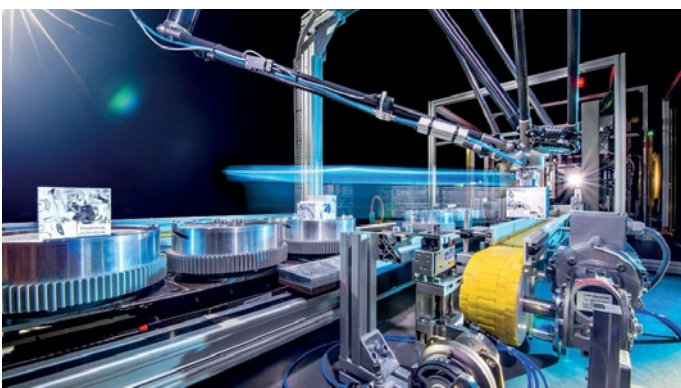
## Academic Content

Modules: Lectures and Exercises	Teaching Units
Numerical Differentiation	8
German Language Placement Test	2
German Language Course	30
Automation	24
Numerical Integration	4
Modelling of ODE	4
Nonlinear Equations	4
Modelling of PDE	8
Discretization Methods	4
Project Work ZuseLab	22
FE Method	4
Modules: Company Visits and Culture	Teaching Units
Final Exam	2
Excursion to Jülich Research Center	4
<b>Sum of Teaching Units</b>	<b>120</b>



## RWTH Aachen University

RWTH Aachen University is one of Germany's universities of excellence. It is a place where the future of our industrialized world is thought out. The university is proving to be a popular spot with increasing international recognition where innovative answers to global challenges are developed.



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