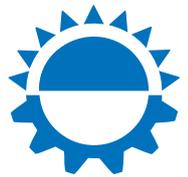


Thinking the Future  
Zukunft denken



# Engineering Summer Schools

RWTH Aachen University, Germany



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. It was placed 24th for Mechanical Engineering in the 2017 QS World University Rankings, making it the best German university in this field.



## Program Objective

All Summer School courses offered by RWTH International Academy are uniquely designed for international students who want to gain insight into one of Germany's Universities of Excellence. RWTH International Academy works closely together with various institutes at RWTH Aachen, as well as the University's International Office and Language Center to offer international students the perfect mix of technical and practical knowledge which is enriched by cultural experiences.



## 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. Ideally, you will already have completed your first academic year. The minimum age to participate is 18 years.



## Quick Facts

<b>Study format</b>	Summer School
<b>Qualification</b>	Certificate
<b>Language</b>	English
<b>Course Fees</b>	EUR 1,800; EUR 2,800 or EUR 3,600
<b>Duration</b>	2, 3 or 4 weeks
<b>Workload</b>	60, 90 or 120 Teaching Units



## Application Information

We will evaluate 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.

# Different courses – one summer!

Choose between the following topics and broaden your engineering horizon in Germany:

## Mechanical Engineering

### Automation and Simulation

In this program, students will learn how to solve problems in mechanical engineering by numerical methods as well as calculation and simulation techniques. Also included is a German Language Course.

### Automotive and Mobility Studies

This program offers in-depth knowledge of modern automotive technologies, concepts of mobility and grid integration of these concepts. Topics included are fuel cells, electric drives, energy carriers and storage, torque, and energy converters.

### Systematic Product Innovation

Systematically developing product innovations is an essential process for every business. This program provides insight into the complex processes of developing a product by performing a case study.

### Production Technology meets Industry 4.0

Industry 4.0 is synonymous with the next revolution of production technology. In this summer school, students will be introduced to cutting-edge production technology and gain first-hand experience.

### Mechatronic Systems Engineering and Product Innovation

Mechanical, electrical and software engineering are essential for every engineer. In theoretical and practical courses, participants study the fundamentals of mechatronic systems engineering, robotics, and IT.

### Robotics for Future Industrial Applications

Robots can be applied in a wide range of industrial applications. This summer school introduces the fundamentals of engineering, controlling and programming of robots by theoretical means and hands-on projects.

## Engineering and Management

### Supply Chain Management & Logistics

Improving a supply chain can be done in various ways. In this program, students address this topic and compare different methods in order to increase performance as well as improve business processes for creating an optimized supply chain.

### Six Sigma Quality Management

This summer school equips students with the basic techniques and tools of project planning, project implementation and project management. These skills are a first step towards reaching leadership and management roles within industrial settings.

## Electrical Engineering

### Smart Electrical Power Systems

Smart power grids are a crucial factor for a successful energy transition. This program offers insight into the physical basics of energy storage, power electronics, power plants, and computational engineering tools.

### Sustainable Energy Technology

Sustainable energy technologies are the core of this summer school. In theoretical and practical courses, students explore sustainable facility and smart city management.

## Civil Engineering

### Structural Engineering of Industrial Facilities

There are numerous threats for industrial facilities. This program focuses on the analysis and design of industrial facilities with respect to exceptional and dynamic loads as well as technical and socio-economic aspects of such projects.

