

Smart Factories

Engineering Winter School - 2 Weeks

Our Winter School courses in engineering 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 19th for Mechanical Engineering in the 2019 QS World University Rankings, making it the best German university in this field.



Academic Content

The program provides students with an introduction to new production technologies in connection with Industry 4.0. This initiative by the German government promotes the integration of industrial production with information and communication technologies. Students will explore fundamental areas of Industry 4.0 and acquire an understanding of current and future requirements in production technology.



Academic Staff

The Winter School is headed by the Cybernetics Lab, which is part of the Faculty of Mechanical Engineering of RWTH Aachen University. It is supported by the Institute of Mechanism Theory, Machine Dynamics and Robotics, the Chair for Digital Additive Production/Fraunhofer ILT, the Institute for Industrial Management and the Institute of Industrial Engineering and Ergonomics.

















Tentative Modules

Possible Lectures and Exercises

Industrial Robotics and Industry 4.0

Additive Digital Manufacturing

Ergonomic Design of Human-Machine Interaction in Advanced Manufacturing Systems

Internet of Things

Mobile Robots for Flexible Intralogistics

Smart Analytics and Data Mining

Possible Institute Visits and Excursions

Visit of Smart Automation Lab

City Excursion to Maastricht or Cologne



Program's Benefits

All Winter Schools are uniquely designed for 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 to offer the perfect mix of technical and practical knowledge which is enriched by cultural experiences. Students are awarded with an official RWTH certificate.



All-inclusive Package

RWTH International Academy understands the Winter School programs as all-inclusive packages. All students will be provided with accommodation, breakfast and lunch on weekdays, a public transportation ticket, and will be invited to social events. The Winter School Team relies on its long-lasting experience in organizing education programs for international students.



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 Engineering or a related field. Ideally, students have already completed their first academic year. The minimum age to participate is 18 years.



Application Information

Prepare the following documents

- Motivation Letter
- Curriculum Vitae
- Color Photo
- Transcript of Records

Apply now!









