



RWTH Aachen University at a Glance



PUBLISHING INFORMATION

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Greetings from the Rector

A very warm welcome to RWTH Aachen University!

RWTH Aachen University, located in the very heart of Europe, is widely recognized as one of the finest universities of technology in the world. Several factors have contributed to this worldwide acclaim, but most important is the fact that RWTH Aachen University offers a unique academic education that has produced and continues to produce countless top scientists and engineers, who with their ingenuity and innovation have profoundly influenced the development of modern technologies.

RWTH Aachen University is dedicated to the ideal of German Engineering. German Engineering is the basis of the success of many famous companies that are flourishing in today's global market. RWTH Aachen University educated engineers are self-reliant, have a firm grasp on the natural sciences, which are the foundation of engineering sciences, and have learned to apply their knowledge in real-life, real-problem scenarios. Our students have access to the most advanced facilities and learn from internationally renowned top researchers. Additionally, we are proud that our students and researchers are constantly exploring new and promising multidisciplinary approaches. Although our main focus lies on engineering sciences we are well aware of the important role of natural sciences, humanities and applied sciences. In these fields too, RWTH Aachen University excels in national and international rankings.

I invite you to discover the wonderful opportunities that RWTH Aachen University offers you – be it as a student, a researcher, a lecturer or a cooperation partner!



Univ.-Prof. Dr. Ernst Schmachtenberg

The Vision of RWTH Aachen University

With over 260 academic institutes organized in nine departments, RWTH Aachen University is among the leading European institutions of higher education and scientific research. Currently, more than 43,000 students are registered in at least one of the 175 study programs that the university offers. Among these students more than 8,000 internationals have joined us from 130 different countries.

RWTH Aachen University sees its educational mission in the preparation of future leaders in society, higher education and business. We seek to accomplish this mission by combining a thorough grasp of theory with the ability to apply knowledge to real-world situations and challenges.

Our graduates are much sought-after as executives and leaders in business and industry. Several rankings and international assessments attest to our graduates' marked ability to handle complex tasks, to solve problems constructively in team work and to take on leadership roles.

Students at our university benefit from the advanced research facilities that RWTH Aachen University has to offer. The work of our research centers is closely oriented towards the current needs of society and industry. This leads to numerous inventions that are patented by our university and are marketed by international companies. The competence centers of RWTH Aachen University achieve very effective cross-subject, inter-departmental collaboration in interdisciplinary networks while maintaining a high level of specialization and differentiation in their particular fields of expertise.

The University's innovative capacity is further reflected in the high number of business start-ups that implement research originating at RWTH Aachen University (currently more than 1,400). As a result, around 32,000 jobs have been created in the region in the last 25 years. Many new products and services originate in Aachen. In our research laboratories and testing facilities, for example, the first all-metal aircraft was developed, as was the diesel soot filter. At our university the world's first wind tunnel and the first particle accelerator were constructed.

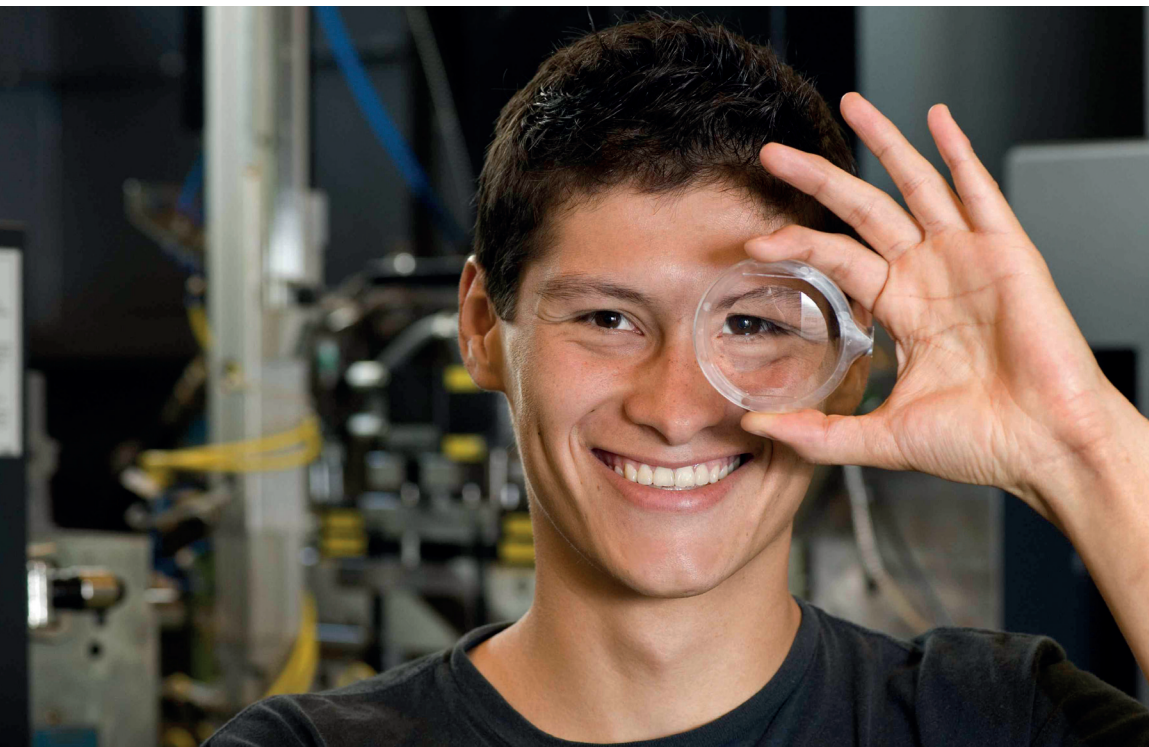
Furthermore, RWTH Aachen University is the largest employer and education provider in the region. It will continue to play a decisive role as a driving force in influencing and shaping the high-tech region of Northwest Germany in the future.

In order to maintain and strengthen RWTH Aachen University's excellent position in higher education and advanced scientific research, the university has adopted a long-term institutional strategy. In this strategy six overarching goals for the future development of the university have been formulated.

These are:

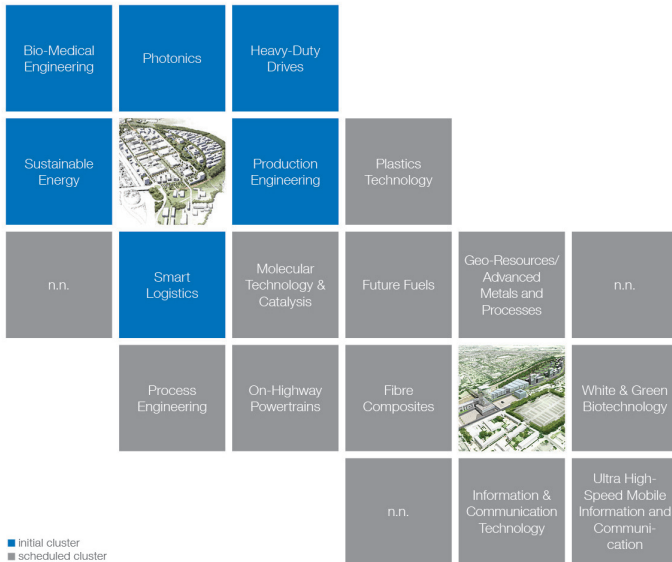
1. Concentrate on the most important research areas of our day, thereby sharpening the focus of research and increasing the visibility of our scientific achievements
2. Continue to be and become even more attractive to the best minds of the world by creating an intellectually stimulating environment
3. Encourage and demand top-level performance at all levels of our institution
4. Use modern research and media to maintain and improve the quality of education
5. Assume a leading position in large scale interdisciplinary projects
6. Acquire sufficient external funding to maintain the high quality level of research and educational facilities

This long-term strategy was recognized by "Excellence Initiative", which is a joint program of the federal government of Germany, the state governments as well as research funding organizations. Only eleven universities within the German higher education system received the distinction of "excellence university" which was awarded only to those institutions that combined an excellent past performance with a convincing plan for their future development.



RWTH Aachen Campus

With its RWTH Aachen Campus, RWTH Aachen University is developing into one of the leading technical universities worldwide. Around the core part of the university – Campus Mitte (Campus Central) – on an area encompassing 800,000 square meters, up to 19 research clusters are being created on Campus Melaten and Campus West. Soon Aachen will be home to one of the largest European research landscapes in the field of technology.



With RWTH Aachen Campus, the university provides a unique spectrum of cooperation services in subject-specific clusters, offering know-how and a unique research infrastructure. Pooling the expertise of science and business partners forms close-to-market clusters that exhibit and further advance a unique type of know-how. National and international businesses are invited to establish their own research and development resources on the campus. Six clusters are currently being built on Campus Melaten: Smart Logistics, Production Engineering, Photonics, Bio-Medical Engineering, Heavy-Duty Drives and Sustainable Energy. More than 250 businesses are already involved in RWTH Aachen Campus.

New Opportunities for Students

RWTH Aachen Campus gives students the opportunity to make contact with businesses early on in their studies. This allows them to gain insights into interesting, real-life topics that businesses are concerned with. Furthermore, they can write their Bachelor's or Master's thesis in one of the research units in a cluster. Even before starting their professional career, all of this provides students with valuable contacts and first-hand real-life experiences shared by the employees of the participating companies. In addition, businesses are also involved in RWTH's teaching program. Thanks to this relationship between science and business, PhD students are getting the chance to carry out research in realistic fields of study. Companies' presence on campus offers both graduates and postdoctoral researchers opportunities to start their post-graduate career in the research environment.



10 Compelling Reasons to study and research at RWTH

1 Academic excellence

RWTH Aachen University is one of the world's leading technical universities in teaching and research, recognized by the German Excellence Initiative.

2 Long-standing tradition in engineering, IT and the natural sciences

Founded in 1870 as a polytechnic university, RWTH has maintained its focus on engineering, IT and the natural sciences but also offers innovative research and programs in medicine, economics and the humanities.

3 Excellent Teaching and Learning

Students are at the focus of teaching excellence. RWTH Aachen University has won prizes for teaching concepts, innovative projects in teaching and the ongoing support of students throughout their studies.

4 Interdisciplinary research in eight profile areas

The University has established eight profile areas to address interdisciplinary topics and to further enhance its capability to engage in significant, large-scale research projects.

5 Close cooperation with industry

The University has a longstanding tradition of mutually-beneficial collaboration with industrial partners. The decisions of international cooperations such as Microsoft, Ford, United Technologies and Philips to establish technology centers around Aachen, were surely inspired by the available expertise in the region.



6 Research-oriented education

RWTH Aachen University offers numerous opportunities to pursue project and thesis work within the scope of ongoing research activities. Entrepreneurship is highly encouraged.

7 State-of-the-art facilities

Students and researchers benefit from a state-of-the-art technological environment which contributes to the success of their scientific endeavours.

8 International atmosphere and cooperation

With its diverse student body (20% international students), RWTH Aachen University offers a multicultural learning atmosphere. Academic programs are oriented to international standards, and students have the opportunity to work with companies and universities world-wide. Aachen is located in the heart of Europe bordering Belgium and the Netherlands, and is only a few hours away from France.

9 Outstanding prospects for employment

RWTH graduates can expect excellent career opportunities in Germany and internationally, and are connected through a distinguished, active alumni network.

10 A supportive and stimulating environment

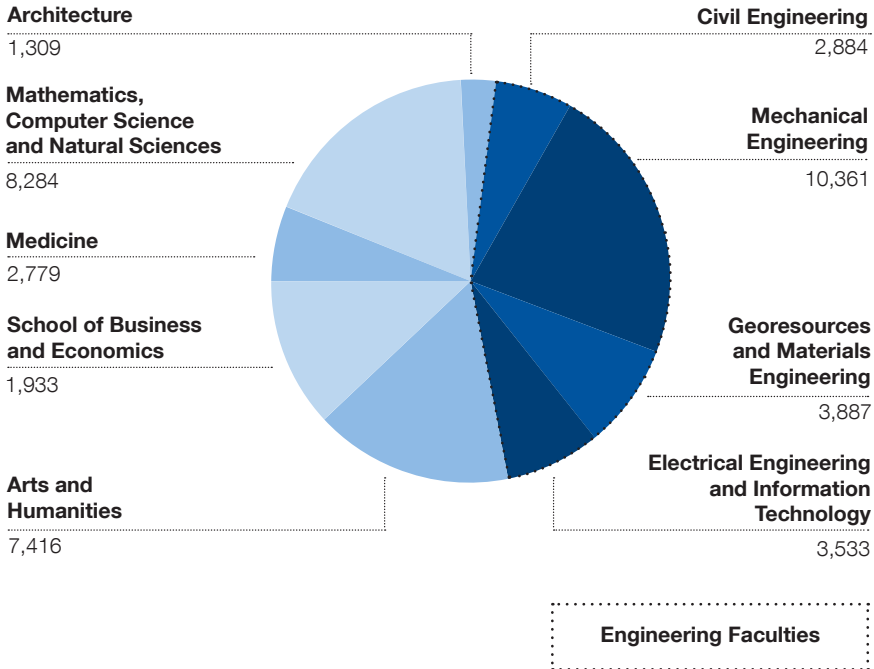
A wide range of services are offered throughout the University, helping students to settle in, improve their skills and thrive in their studies. In addition RWTH Aachen University offers a wide variety of sports and cultural activities.



Overview of Faculties

With 260 institutes, RWTH Aachen University is one of Europe's premier educational and research institutions. The University's nine faculties offer a wide range of academic subjects, including numerous traditional academic disciplines. Over 500 professors and almost 8,000 staff are employed in research, teaching and administration.

Student numbers at RWTH Faculties



Ranking Positions of RWTH Aachen University

1st Place | Mechanical Engineering, Business Administration, Natural Science
Wiwo-Ranking 2015

2nd Place | Electrical Engineering
Wiwo-Ranking 2015

3rd Place | Computer Science
Wiwo-Ranking 2015

4th Place among German Universities | Engineering and Technology
Shanghai Ranking 2015

6th Place among German Universities | Natural Sciences and Mathematics
Shanghai Ranking 2015

8th Place among German Universities | 145th place overall
QS Ranking 2015

11th Place among German Universities | 110th place overall
THE Ranking 2015

12th Place | Mechanical Engineering
QS Ranking by Subject 2015

14x Grades 1 (Very good) and 2 (Good)
U-Multirank 2015

29th Place | Materials Science
QS Ranking by Subject 2015

30th Place | Physics and Astronomy
QS Ranking by Subject 2015

30th Place | Engineering and Technology
THE Ranking 2015

34th Place | Chemical Engineering
QS Ranking by Subject 2015

40th Place | Chemistry
QS Ranking by Subject 2015

48th Place | Physical Science
THE Ranking 2015

125th Place
SIR World Report 2014



Facts & Figures

Academics



Students

43,721



International Students

8,040



Graduates in 2014

6,480



Faculties

9



Courses of Study (Bachelor and Master)

144

Staff



Professors

538



Other Academic Employees and Assistants

5,230



Technical and Administrative Employees

2,722

International



Partnerships with universities worldwide

1,043

Most recent Awards



Two time consecutive winner of the Excellence Initiative



Winner of Excellent Teaching Competition "Students in Focus"

Annual Budget 2014



Total annual budget in million euros
of which external funding in million euros

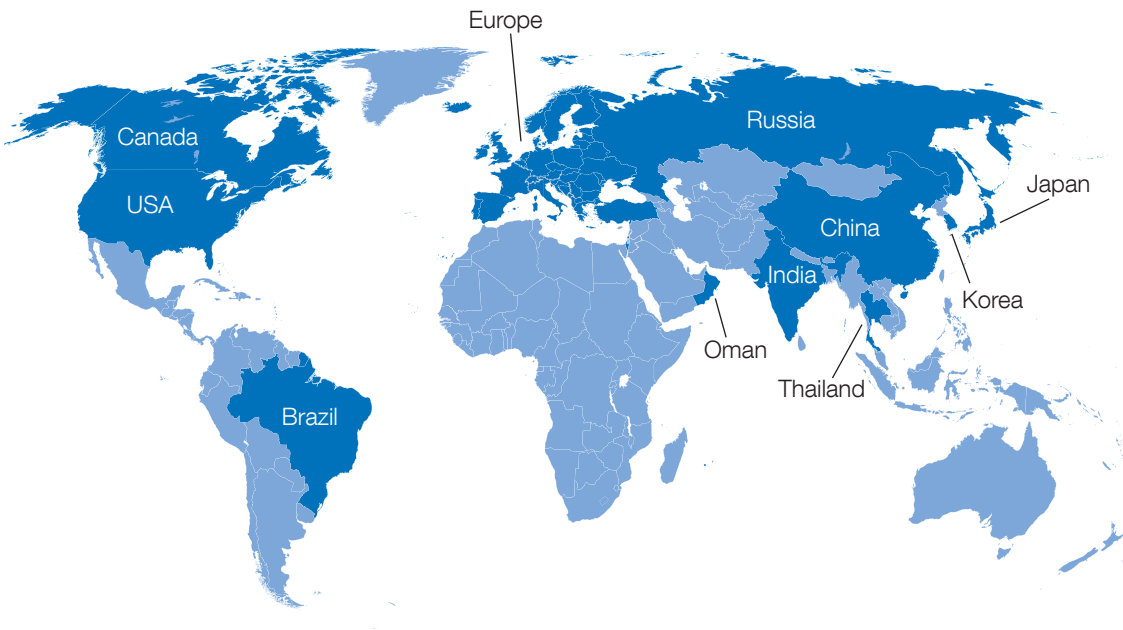
839.5

330.4

Key Partner Countries of RWTH Aachen University

Against a background of increasing national and international competition for research funds and qualified students and scientists, RWTH Aachen University is further strengthening its fields of activity (academics – teaching – research – continued education) and is distinguishing itself and expanding through international cooperations.

RWTH Aachen University has strategically defined target countries on which to focus its international endeavours. This strategy provides the basis for new partnerships and collective international activities.



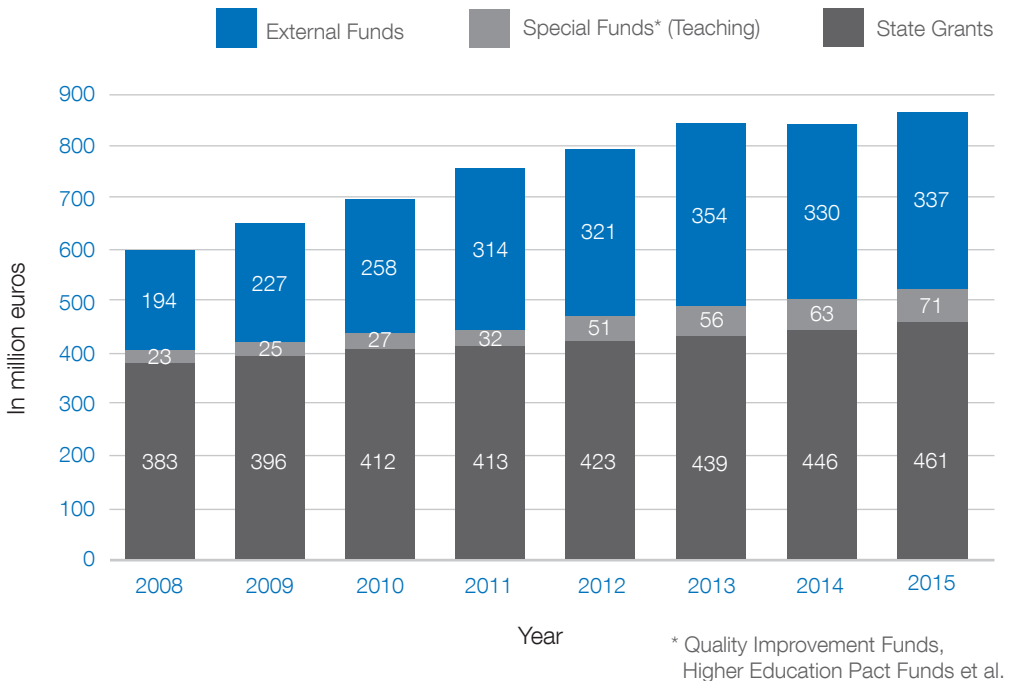
External Funding for RWTH Aachen University

Alongside classic bibliometric performance indicators in academia, for example impact factors and citation indices, the total amount of third-party funding raised is another major indication of top quality research and scientific performance.

Over the past eight years, RWTH Aachen University has continually been the top university in Germany overall with regard to third-party funding acquisition. Since 2010 RWTH has succeeded in raising an additional 100 million euros achieving a total of 337 million euros in external funding. This accounts for over a third of the university's total annual budget.

Extramural funds are acquired through public research funding organizations including the EU or the German Research Foundation, but also from business and industry. Foundations, associations and individual research sponsors contribute to RWTH's third-party funding budget.

Budget development





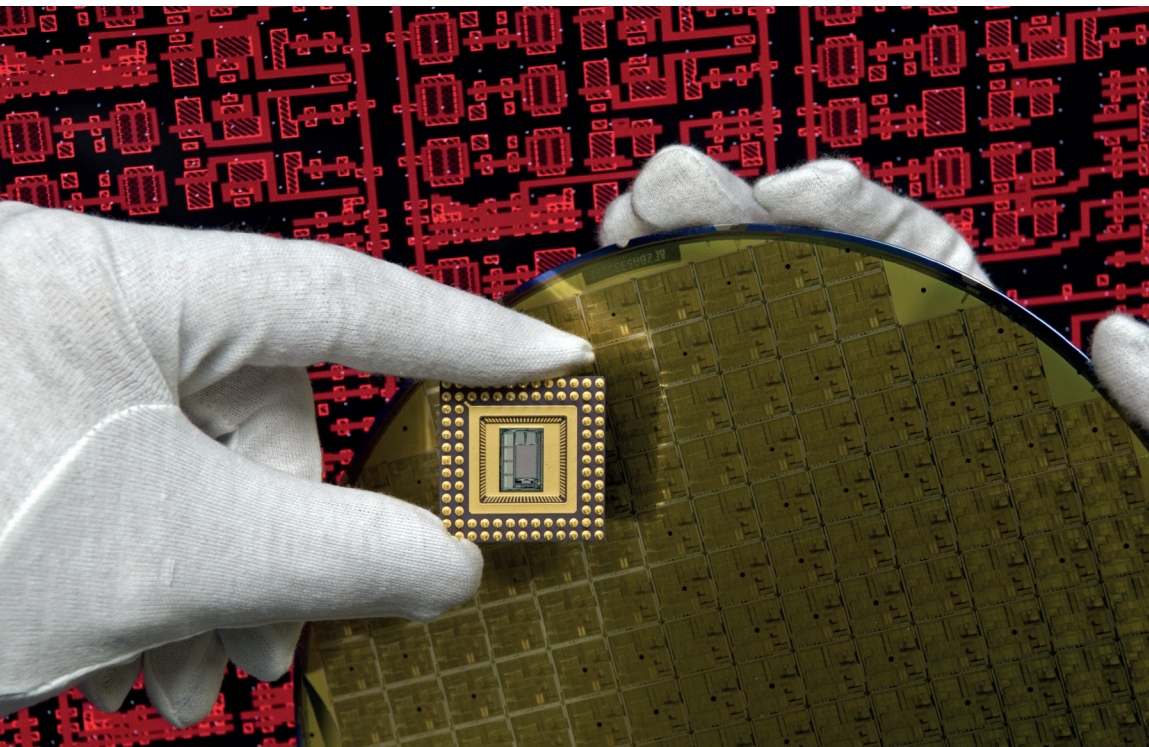
Top-Level Research at RWTH Aachen University

RWTH Aachen University is a research hotspot with increasing international recognition as a location for the development of solutions for global challenges. RWTH's success in Germany's Excellence Initiative reflects this outstanding reputation for research and education in the science, technology, and engineering fields. Research is characterized by an interdisciplinary approach with relevance to real-world problems.

RWTH Aachen University is convinced that in order to solve today's complex and multi-faceted problems, universities must develop interdisciplinary, integrated approaches. One core element is the development and integration of Profile Areas, with the aim to further consolidate and enhance interdisciplinary collaboration.

The university has established eight Profile Areas:

- Computational Science & Engineering
- Energy, Chemical & Process Engineering
- Information & Communication Technology
- Material Science & Engineering
- Medical Science & Technology
- Molecular Science & Engineering
- Mobility & Transport Engineering
- Production Engineering



JARA – Jülich Aachen Research Alliance

JARA is a joint venture of RWTH Aachen University and Forschungszentrum Jülich promoting scientific cooperation and exchange by bringing together university researchers with experts from a high-profile non-university research institution. The Alliance collaborate in fields such as translational brain research and sustainable energy research. JARA provides a scientific environment that is at the top of the international league and attracts the best researchers worldwide.

Clusters of Excellence

The Clusters established at selected German universities are internationally recognized, competitive research institutions which make it possible for scientists to conduct research and collaborate in an inspiring setting. They also provide excellent support and career opportunities for junior researchers. Three out of 37 Excellence Clusters with an average annual budget of 6.5 million euros are funded at RWTH Aachen University: Integrative Production Technology for High-Wage Countries, Tailor-Made Fuels from Biomass and Ultra High-Speed Information and Communication.

Programs funded by the German Research Foundation (DFG)

These programs promote cooperation and structural development by encouraging national and international collaboration in cutting-edge, often multidisciplinary research areas and by pooling the scientific potential available at the university.

- 9 Collaborative Research Centers managed at RWTH Aachen University plus 7 with participation from RWTH Aachen University
- 9 Research Units
- 6 Priority Programs with participation from RWTH Aachen University
- 16 Graduate Research Training Groups

Project Houses

The vision of an integrated interdisciplinary university of technology is reflected in currently six Project Houses which promote the integration and collaboration of various disciplines such as engineering, natural sciences, arts and humanities, business and economics and medicine, towards an integrated interdisciplinary university of technology. Researchers are supported in identifying, establishing, promoting, and eventually maintaining research fields in interdisciplinary growth areas from the initial exploration of new ideas to the creation of research centers.

Fraunhofer-Institutes

The Fraunhofer-Gesellschaft is Europe's largest application-oriented research organization. 67 research institutes are driving the innovation process, four of them in Aachen in close cooperation with RWTH Aachen University: The Fraunhofer Institute for Applied Information Technology FIT, the Fraunhofer Institute for Laser Technology ILT, the Fraunhofer Institute for Production Technology IPT, and the Fraunhofer Institute for Molecular Biology and Applied Ecology IME.

Studying at RWTH Aachen University

Study in one of Germany's most highly-renowned academic institutions and learn from world-class scholars and researchers

With over 170 study programs, RWTH Aachen University not only produces outstanding experts in their respective educational fields but also prepares students to become future leaders and innovative members of society.

Educational quality

Research and teaching are closely intertwined assuring the highest standards in educational quality. Students learn from world-class researchers and take part in hands-on research projects.

Employability: RWTH Aachen University graduates are in high demand

Business magazines and HR professionals rank RWTH alumni as among the most highly sought-after graduates in the employment market. Due to the University's close ties with industry, RWTH graduates offer a unique blend of theoretical expertise and practical experience. Many of the top management positions in both the private and public sectors are held by RWTH alumni and the innovative potential of RWTH graduates has yielded countless startups and business enterprises.



Innovative teaching approaches and awards

RWTH Aachen University is a pioneer in innovative approaches to teaching and online technologies which are aimed at enriching the educational experience and expanding opportunities for learners worldwide. The University's excellence in teaching is reflected in the strong increase in student numbers and teaching awards.

International education experience

RWTH Aachen University is proud of its large international network and cooperation with the most prestigious universities worldwide. Students can choose among a wide variety of international study and internship programs supported by scholarships.

Student support

We expect a lot from our students: excellent performance, dedication and motivation as well as a high degree of self-reliance and independence. However we also provide a high level of support with tailored mentoring programs throughout the study period and welcome and orientation programs for international students.





The Location – the City of Aachen

Aachen is an ancient city with a rich history. The area on which it was built was appreciated by the Romans for its natural springs and to this day Aachen is renowned for the therapeutic qualities of its thermal waters. Aachen's historical significance dates back to the days of Charlemagne, the “father of Europe”.

Aachen cathedral, the first German building to be listed as a UNESCO world heritage site, the gothic city hall, and the cathedral treasury give testimony to the city's cultural heritage and beauty.

Despite the city's advanced age of more than 2000 years, Aachen is a young and vibrant city with around 20% students.



Aachen is a medium-sized, international city of 250,000 residents from 160 nations, whose lives are perceptibly influenced by its geographical location: As Germany's westernmost city, Belgium and the Netherlands can be reached easily within just a few minutes. Major cities such as Brussels, Cologne and Düsseldorf are just a short trip away.

The narrow winding streets in the city center and its numerous fountains render Aachen a very romantic and idyllic location. Aachen is also famous for its annual events such as CHIO, the World Equestrian Festival, and the award ceremony of the International Charlemagne Prize, which is awarded in recognition of services promoting European peace and unity. For detailed information please visit:

<http://www.aachen-emotion.com/en-students/content/welcome-to-aachen-students>.

Travel distance (by train):

Aachen - Brussels:	1.0h
Aachen - Paris:	2.5h
Aachen - Amsterdam:	3.5h
Aachen - London:	4.5h
Aachen - Berlin:	5.5h





Important Links for International Students and Researchers

The International Office is the **first port of call** for over 7,000 international students at RWTH Aachen University offering advice, measures to support students' studies, and information about life in Aachen and studies at RWTH Aachen University.

www.rwth-aachen.de/international

If you are interested in conducting **research at our university**, the Welcome Center for Researchers is happy to provide important tips for planning your research and stay in Aachen.

www.rwth-aachen.de/welcomecenter

If you require **general information** about studying at RWTH Aachen University, the Info Service Center for students will gladly answer your questions and provide information on a vast range of topics.

www.rwth-aachen.de/isc

If you are interested in a **Bachelor's, Master's, or doctoral degree** you can find all the necessary information about studying at RWTH Aachen University as an international student on our webpages.

www.rwth-aachen.de/degreetudents

If you are interested in studying at RWTH Aachen University as an **exchange student**, you will find some information here:

www.rwth-aachen.de/exchangestudents

If you have been accepted to study at RWTH Aachen University, we look forward to welcoming you at our **Welcome & Orientation Days**.

www.rwth-aachen.de/orientationdays



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willkommen

환영합니다
Добро пожаловать
Ласкаво просимо
dobrodošli
benvenuto
fáilte
welkom
vítáme tě
bienvenue
أهلاً وسهلاً
ยินดีต้อนรับ
welkom
hoan nghênh
välkommen
καλώς Ορίσαστε
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Dobre došli
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welcome
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dobrodošli
aloha
خوش آمدید



Thinking the Future
Zukunft denken

